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MTADS Magnetometer Survey of the Badlands Bombing Range, SD Impact Area

Combined Airborne, Vehicular, and Man-portable Survey, September 2002

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14. ABSTRACT

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In 1999 and 2001, the Naval Research Laboratory conducted demonstration surveys on the Badlands Bombing Range Impact Area using the vehicular and airborne Multi-sensor Towed Array Detection System (MTADS). During these surveys, live 155-mm and 8-in projectiles were recovered and destroyed. In September 2002, the Air Force Center for Environmental Excellence (AFCEE) and NRL jointly conducted a geophysical survey of the remaining 750 accessible acres of the Impact Area. The survey was conducted using the NRL MTADS airborne, vehicular, and man-portable magnetometer platforms. The area around and under the treed portions of the site, along and over the White River, along the escarpment, and in the ravines on the upper portion of the site were covered. Survey data were analyzed and targets selected using criteria developed for the 2001 airborne survey. The 1143 selected targets were classified into six categories ranging from category 1 (high confidence UXO), through categories 3 (low confidence UXO) and 4 (low confidence clutter), to category 6 (high confidence clutter).

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Multi-sensor Towed Array Detection System (MTADS); Airborne magnetometry; Unexploded ordnance (UXO)

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EXECUTIVE SUMMARY

In 1942 the Department of War annexed 341,725 acres of the Pine Ridge Reservation for use as an aerial gunnery and bombing range. From 1942 until 1948 various sections of this range were used for bombing exercises and air to ground operations. Since 1960, portions of the land have been returned to the Oglala Sioux Tribe (OST) in a step-wise fashion. In 1978, all remaining Badlands Bombing Range (BBR) lands were declared excess with the exception of 2,486 acres termed the Impact Area.

In 1999 the Naval Research Laboratory, NRL, conducted a demonstration survey on the Badlands Bombing Range Impact Area using the Multi-sensor Towed Array Detection System (MTADS). Historical records indicated that 105-mm, 155-mm, and 8-in projectiles had been used on the site. During this survey, eight live 155-mm and seven live 8-in projectiles were recovered and destroyed but no 105-mms. In September 2001 NRL returned to the same area to conduct an Advanced Classification Demonstration with the vehicular MTADS on a 10-acre seeded site and a larger, 1685-acre, survey with the new airborne MTADS. Again, seven live 155-mm and four live 8-in projectiles were found and detonated.

The Air Force Center for Environmental Excellence (AFCEE) and the Ellsworth Air Force Base Environmental Office have a dual interest in this site. First, they would like to be able to certify the site as clear of UXO to facilitate the excessing of the land from Government ownership. Second, they would like to determine if a combination man-portable, vehicular, and airborne survey can reliably and completely cover a site of varying topography such as the Impact Area. To further these goals, AFCEE and NRL jointly conducted a geophysical survey of the remaining 750 accessible acres of the Impact Area with the aim of finding all remaining 105-mm, 155-mm, and 8-in projectiles.

The survey was conducted using the NRL MTADS airborne, vehicular, and man-portable magnetometer platforms from 16 September through 26 September 2002. The remaining 750 acres around and under the treed portions of the site, along and over the White River, along the escarpment, and in the ravines on the upper portion of the site were covered. Survey data were analyzed and targets selected using criteria developed for the 2001 airborne survey. The selected targets were classified into six categories ranging from category 1 (high confidence UXO), through categories 3 (low confidence UXO) and 4 (low confidence clutter), to category 6 (high confidence clutter). The 1143 selected targets were classified as follows:

Category	# of Targets	Category	# of Targets	Category	# of Targets
1	53	3	184	5	151
2	130	4	132	6	493

An additional 872 selected targets remain to be remediated from the 1999 and 2001 surveys.

The costs associated with the 2001 airborne survey and the 2002 combined survey are approximately \$100 per acre. This cost is for the geophysical survey, data analysis, and reporting only, it does not account for equipment amortization. In addition, it does not include remediation costs which, in our experience, have averaged \$200 per target investigated.

MTADS MAGNETOMETER SURVEY OF THE BADLANDS BOMBING RANGE, SD IMPACT AREA

COMBINED AIRBORNE, VEHICULAR, AND MAN-PORTABLE SURVEY, SEPTEMBER 2002

INTRODUCTION

Background

Buried unexploded ordnance (UXO) is one of the Department of Defense's most pressing environmental problems. Not limited to active ranges and bases, UXO contamination is present at DOD sites that are dormant and in areas adjacent to military ranges that are under the control of other government agencies and the private sector.

Traditional methods for buried UXO detection, characterization, and remediation are labor-intensive, slow and inefficient. Typical detection and characterization methods rely on hand-held detectors operated by explosive ordnance disposal (EOD) technicians who slowly walk across the survey area. This process has been documented as inefficient and marginally effective. In addition, a large portion, approaching 70% in some cases, of the total budget of a typical remediation effort is spent on digging targets that do not turn out to be UXO.

The Environmental Security Technology Certification Program, ESTCP, has supported the Naval Research Laboratory (NRL) in the development of the Multi-sensor Towed Array Detection System, MTADS, to address these deficiencies. The MTADS incorporates both cesium vapor full-field magnetometers and pulsed-induction sensors in linear arrays that are towed over survey sites by an all-terrain vehicle. Sensor positioning is provided by state-of-the-art Real Time Kinematic (RTK) GPS receivers. The survey data acquired by MTADS is analyzed by an NRL-developed Data Analysis System (DAS). The DAS was designed to locate, identify and categorize all military ordnance at its maximum self-burial depth. It is efficient and simple to operate by relatively untrained personnel.

The performance of the MTADS has been demonstrated at a number of prepared sites and live ranges over the past five years.²⁻¹² It can detect and locate ordnance with accuracies on the order of 15 cm.⁵

In 1942 the Department of War annexed 341,725 acres of the Pine Ridge Reservation for use as an aerial gunnery and bombing range. This site is located in the Southwest corner of South Dakota, with the largest part of the Bombing Range located in Shannon County. From 1942 until 1948 various sections of this range were used for bombing exercises and various air to ground operations. Since 1960, portions of the land have been returned to the Oglala Sioux Tribe (OST) in a step-wise fashion. In 1968, Congress enacted Public Law 90-468 returning 202,357 acres to the OST, and setting aside 136,882 acres of formerly held Tribal lands to form the Badlands National Monument, to be managed by the National Park Service. In 1978, all remaining Badlands Bombing Range (BBR) lands were declared excess with the exception of 2,486 acres, (subsequently referred to as the Air Force Retained Area). Prior to 1978 this parcel was referred to as the Impact Area (IA). In about 1965 the South Dakota National Guard placed up to 100 car bodies on the 2,486-acre area and began using them as artillery targets during training exercises. The National Guard training exercises took place on the IA between 1966 and 1973.

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There have been 6 documented UXO clearance operations on the BBR taking place between 1948 and 1997. These are discussed in more detail in Ref. 14. Only two have significant relevance to the present demonstration on the IA.

During the summer and fall of 1975 ten EOD personnel participated in a searchline walking clearance of 22,403 acres and a vehicular search of 19,222 acres. This included a walking searchline survey of the entire IA and the buffer zone. With the exception of the IA, all lands were declared as cleared and certified for return to the Tribe. The IA apparently contained too much OE material to declare the area "cleared." The 1975 Certificate of Clearance describes the plowing of 1,088 acres of the IA using ripper plows to clear buried ordnance. Aerial photographs clearly show that the plowing took place after 24 July 1976. The Clearance Report documents recovery of the items listed below without specifying which of these items were associated with the IA.

- 5 155-mm Howitzer projectiles
- 3 155-mm illumination projectiles
- 1 8-in Howitzer projectile
- 1 10-lb Spotting Charge
- 2 155-mm Illumination Candles
- 4 Smoke Grenades
- 15 50 Cal Cartridges
- 46 100-lb Practice Bombs

During the 4-month summer period of 1997, a walking and driving searchline ordnance clearance was conducted by 20 EOD personnel operating from Ellsworth AFB. With the exception of 56 acres of rugged terrain along the White River, the entire IA was covered. EOD teams used metal detectors (mine detectors) to search for buried metal. The objective was to clear the area to a depth of 1.5 feet. The OE scrap recovered included 4000 lbs of shrapnel (pieces larger than 3 inches). An additional 8,000 lbs of non-ordnance related metal scrap was recovered, including 6 car bodies, a washing machine, barbed wire, and fencing material. Live ordnance items that were blown in place are enumerated below.

- 3 20-mm aircraft gun ammunition
- 1 50 Caliber Cartridge
- 1 105-mm High Explosive Howitzer Round
- 3 155-mm High Explosive Projectiles
- Inert Components of a 155-mm Illumination Projectile

In 1999 NRL conducted a demonstration survey on the Badlands Bombing Range Impact Area (Air Force Retained Area). In preparation for this work, NRL conducted site visits, records searches, Tribal coordination activities, acquisition of aerial photography, and pre-surveying of first-order control points to support the activity. During this survey, eight live 155-mm and seven live 8-in projectiles were recovered and destroyed but no 105-mms. This cast some doubt on the completeness of the earlier clearances.

In September 2001 we returned to the same area to conduct an Advanced Classification Demonstration with the vehicular MTADS on a 10-acre seeded site and a larger, 1685 acre, survey with the new airborne MTADS. ¹⁵ Again, seven live 155-mm and four live 8-in projectiles were found and detonated. We were unable to cover the entire site due to delays associated with the events of September 11, 2001.

The Air Force Center for Environmental Excellence (AFCEE) and the Ellsworth Air Force Base Environmental Office have a dual interest in this site. First, they would like to be able to certify the site as clear of UXO to facilitate the excessing of the land from Government ownership. Second, they would like to determine if a combination man-portable, vehicular, and airborne survey can reliably and completely cover a site of varying topography such as the Badlands Bombing Range Impact Area. To further these goals, AFCEE and NRL jointly conducted a geophysical survey of the unexplored portions of the Impact Area in September 2002 with the aim of finding all remaining 105-mm, 155-mm, and 8-in projectiles. This report documents the results from that survey.

MTADS TECHNOLOGY DESCRIPTION

MTADS Field Hardware

Vehicular Magnetometer System

The MTADS hardware consists of a low-magnetic-signature vehicle that is used to tow linear arrays of magnetometer and pulsed-induction sensors to conduct surveys of large areas to detect buried UXO.¹³ The MTADS tow vehicle, manufactured by Chenowth Racing Vehicles, is a custom-built off-road vehicle, specifically modified to have an extremely low magnetic signature. Most ferrous components have been removed from the body, drive train and engine and replaced with non-ferrous alloys.

The MTADS magnetometers are Cesium-vapor full-field magnetometers (Geometrics Model 822ROV) selected for low noise and inter-sensor reproducibility. An array of eight sensors is deployed as a magnetometer array on an aluminum and composite platform, Figure 1. The sensors are sampled at 50 Hz and typical surveys conducted at 6 mph; this results in a sampling density of ~6 cm along track with a horizontal sensor spacing of 25 cm. The time-variation of the Earth's field is measured by a ninth sensor deployed at a static site removed from the survey area. These data are used to correct the survey magnetic readings.



Fig. 1 – MTADS magnetometer array during the 2001 survey at the IA

The sensor positions are measured in real-time (20 Hz) using the latest Real Time Kinematic (RTK) Global Positioning System (GPS) technology which results in position accuracies of ~5 cm. All navigation and sensor data are time-stamped with Universal Coordinated Time (UTC) derived from the satellite clocks and recorded by the data acquisition computer (DAQ) in the tow vehicle. The sensor, position, and timing files are downloaded periodically throughout a survey onto magnetic disks and transferred for analysis.

Man-portable Magnetometer System

In order to collect high-quality field data in areas not amenable to vehicular surveys, NRL has also developed a pair of man-portable adjuncts to the MTADS. The man-portable magnetometer system, Figure 3, is designed to collect data equivalent to that collected by the vehicular system. As in the original MTADS, the sensors are spaced 25-cm apart and are maintained at 25 cm off the ground. The magnetometer cart is constructed of a combination of fiberglass and plastic components with the two wheels placed side-by-side between the sensors. This design is effective on rugged and uneven terrain. Not shown in Figure 3 is an optional hood that can be placed over the magnetometers and GPS antenna for situations where grass or low brush snags the sensors. The magnetometer cart weighs 38 lbs. without the hood and 52 lbs. with it. The operator's backpack, which contains the GPS receiver, radio, and system batteries, weighs 18 lbs.



Fig. 2 – MTADS man-portable magnetometer system at the BBR

Sensor and location data are logged with a modified Geometrics G858 data recorder. We have had this unit modified by the manufacturer to better suit our survey requirements. These modifications include an increase in system timing precision of more than a factor of 10, incorporation of two additional serial ports for logging of additional location strings and the 1 PPS sync pulse from the GPS receiver, and display of the GPS fix quality on the logger screen in real time. With these modifications, the data collected by the man-portable system is indistinguishable from vehicular data.

Airborne Magnetometer System

The airborne MTADS system hardware includes an array of seven total field magnetometers mounted on a Bell Helicopters Model 206L series "Longranger." The MTADS magnetic sensors are Cs-vapor full-field magnetometers (a variant of the Geometrics 822 sensor, designated as the Model 822A). The helicopter with the magnetometer array mounted is shown in Figure 3. All sensors are interfaced to a data acquisition computer (DAQ). The DAQ electronics are contained in a rack mounted in the rear starboard seat position in the helicopter, Figure 4. The interface to the helicopter power and power distribution system is also in the rack, as are readouts for all the sensor inputs. The survey progress is monitored continually by an operator in the rear port seat. In the 9-meter boom, the seven sensors are mounted with 1.5 meters horizontal spacing. The specially-selected magnetometers, which are airborne quality, were acceptance tested at the manufacturer's facility to verify sensitivity, sensor noise, heading error, dead zones, inter-sensor compatibility, and performance with the multi-sensor interface modules.



Fig. 3 -MTADS airborne system deployed at the BBR in 2001



Fig. 4 – Airborne data acquisition system (DAQ) mounted in rear seat of the survey helicopter

The sensor positions above the surface of the Earth (latitude, longitude, and height above ellipsoid) are determined using satellite-based GPS navigation, employing the latest Real Time Kinematic (RTK) technology, which provides a real-time position update (at 20 Hz) with an accuracy of about 5 cm. GPS satellite clock time is used to time-stamp both position and sensor data information for later correlation.

The helicopter pilot flies the survey using an onboard navigation guidance display, Figure 5. The survey parameters are set up in a second computer that supports the pilot display. This computer shares the GPS navigation data with the DAQ. The survey guidance display provides left-right indicators, altitude indicator, an automatic line number increment, an adjustment for lateral offset, a color-coded flight swath overlay, and the ability to zoom in or out on the display. The survey course-over-ground (COG) is plotted for the pilot in real time on the display, as are presentations showing the data quality for the primary sensors and the GPS navigation fix quality. This allows the operator to respond to both visual cues on the ground and to the survey guidance display. Following a survey, the operator can survey any missed areas before leaving the site.



Fig. 5 – Two views of the pilot guidance system

Data Analysis

For the vast majority of MTADS surveys, the MTADS Data Analysis System has been used to convert the sensor and position data files into an anomaly map by interpolating the individual sensor readings using the GPS-derived positions. The DAS software was developed specifically for the MTADS program as a stand-alone suite of programs. PC-based code is now available and was used for this operation. The DAS is written for use by both sophisticated and novice users. Even the novice can perform a complete anomaly analysis using menu-driven tools and default settings. For the advanced user, there is an extensive range of options available including navigation data cleanup, sensor nulling and leveling, noise filtering, etc. A working screen of the DAS is shown in Figure 6.

In the case of isolated ordnance targets in the far field (i.e. farther from the sensors than their characteristic dimension) the DAS employs resident physics-based models to determine target size, position, and depth. Extensive data sets have been acquired and processed to calibrate these models. Using these models, we have demonstrated probabilities of detection of 95 to 97% and location accuracies of 15 cm with the magnetometer system.

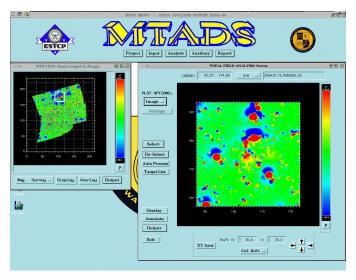


Fig. 6 – A working screen of the MTADS DAS showing the project view on the left and an expanded analysis window on the right

Although we have achieved impressive results using the DAS, it has proven difficult to transition to the general UXO user community. Beginning with the demonstrations of the airborne system, we have performed the data preprocessing functions through generation of mapped data using a commercial software package, Geosoft Oasis montaj™. An example of a working screen from montaj™ is shown in Figure 7. The upper part of the screen shows a portion of the Oasis database, the middle shows plots of one of the sensor data tracks (uncorrected and corrected), and the lower part shows a detail of the mapped data.

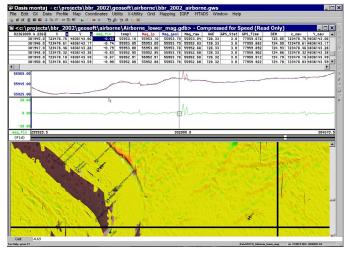


Fig. 7 – A working screen of Oasis montaj $^{\text{TM}}$ showing airborne data from this survey

At this point in our development, we import the mapped data files generated using montaj™ into the MTADS DAS for target selection and analysis. We are in the process of converting the analysis routines developed under ESTCP and SERDP sponsorship to Geosoft GXs, executable files that can be called from the Oasis environment. This will allow us to perform the entire data analysis from input of raw data files through data quality checks, mapping of individual sensor readings, target selection, model fit, and finally generation of target lists and output graphics in the Oasis environment. All target analyses reported here were accomplished using routines in the MTADS DAS.

SURVEY ACTIVITIES

Performance Objectives

The goals of this survey were two-fold and of equal importance. First, to serve the interests of the Air Force in certifying the site as clear of UXO to facilitate the excessing of the land from Government ownership we needed to survey as much of the Impact Area as was physically accessible. Second, and connected to the first, we hoped to demonstrate that a combination man-portable, vehicular, and airborne surveys can reliably and completely cover a site of varying topography such as the Badlands Bombing Range Impact Area.

Site Maps

Figure 8 is a portion of a USGS 7.5-minute topo map showing the location of the Retained Area outlined in red. The Retained Area Range is surrounded by a buffer zone generally of about 1000 meters width. The Retained Area perimeter fence is shown in red, portions of the buffer boundary are in green. A second perimeter fence is located at the outer border of the buffer zone. The most direct access to the Retained Area is by a dirt road that exits to the south from Highway 44. The dirt road was graded, including installation of some culverts, to support the 1997 EOD clearance activities. It was only usable on a few of our survey days due to intermittent rain. For most of our time on site, access was from the western side of the site via the Section Road between Sections 30 and 31. There is only one fence internal to the Retained Area. This east-west fence bisects sections 29 and 30 and is labeled "cross fence" in Figure 8. Three geodetic survey points are located on the Retained Area. These sites, labeled North BM, East BM, and USGS BM were upgraded to "near first-order" by Ellsworth AFB CES personnel using the OST 5 benchmark. The latter point was established by NRL contractors in 1997 and is legitimately first order. All 1999 NRL surveys were done using the North BM coordinates provided by Ellsworth AFB. The coordinates of each of these points are given in Table 1.

Table 1 – Impact Area Survey Coordinates Provided by Ellsworth AFB

Point	Latitude	Longitudo	Northing (m)	Easting (m)	Height (m)
	Latitude	Longitude	NAD 83		Height (iii)
OST 5	43° 42' 05.2702"	-102° 18' 35.5186"	4842233.05	716761.31	804.460
North BM	43° 40' 19.1197"	-102° 14' 20.5113"	4839145.82	722578.26	762.530
East BM	43° 39' 21.2053"	-102° 13' 42.8268"	4837387.2	723481.89	764.260
USGS BM	43° 38' 53.7820"	-102° 14' 18.7564"	4836514.29	722705.23	765.940

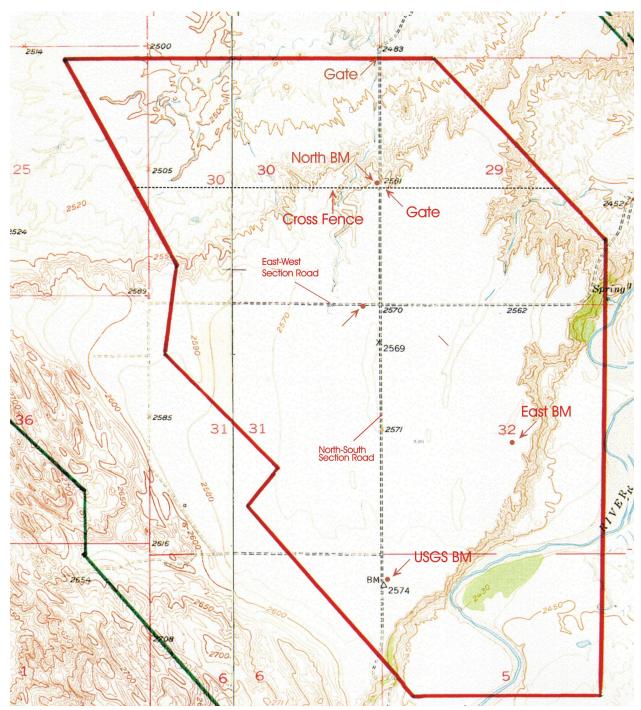


Fig. 8 – A portion of a USGS 7.5 minute map showing the perimeter of the Impact Area

Pre-survey Activities and Logistics

As the MTADS system has conducted two previous surveys on the Impact Area, many of the normal pre-survey activities such as a site visit, establishment of first-order GPS reference points, identification of logistics vendors, etc. were not needed.

The MTADS vehicular, airborne, and man-portable magnetometer systems were mobilized to the BBR in a rented 53-ft truck. The tow vehicle, the sensor trailer, an office PC, two data analysis PCs, GPS equipment, batteries and chargers, office equipment, radios and chargers, tools spares and maintenance items, the man-portable cart, and the airborne boom components and magnetometers were transported in the truck. A transportation firm under government contract transported the trailer to the site. The helicopter was mobilized to the site by the helicopter charter firm, Helicopter Transport Services.

For this effort, no essential support services were available on-site. Accordingly, NRL made provisions to acquire all of the requisite supplies, materials, and facilities. The nearest source for rental equipment is Rapid City, about 75 miles from the IA. The base facilities were similar to those used in 1999 and 2001. For this operation one trailer was used for data processing and analysis, a communications center, and support for the field equipment with battery storage and charging stations, an electronics repair station, and storage for spares and supplies. This trailer had AC power and air conditioning. A second 8 x 48 foot trailer, which could be fully opened from either end (for drive through), was used as a garage and for secure storage of the MTADS vehicle and sensor platform. Power to the trailers was provided by a 65 KW diesel field generator that was also used to recharge the vehicle, radios and GPS batteries overnight. Communications among on-site personnel was provided by handheld VHF radios, with a base station located in the command trailer. Radios were provided to all field and office teams. Cellular phone communications were available at the office trailer with sporadic availability and at the crossroads with good signal strength. Diesel fuel storage was provided for the AC generator and portable toilets were provided to support all field and office crews with weekly servicing. Jet A fuel for the helicopter was provided in a tank truck by a local vendor. The MTADS base camp was established near the southern end of the site along the N-S Section road. Figure 9 is an aerial photo of the camp showing the arrangement of the trailers along with members of the survey crew and their rental vehicles.



Fig. 9 – Aerial photo of the MTADS base camp used for this survey

On-site Labor

A variety of personnel were on-site during the course of the survey depending on the platforms active at any time. During the week of September 16th, all three platforms were in use and thus the largest number of personnel were on site. The requirements the first week were met by a combination of NRL, AFCEE, and contractor personnel. The airborne survey concluded at the end of the first week so fewer personnel were required. This requirement was fulfilled by NRL and contractor personnel. Table 2 lists the personnel used to support each task and their attendance for the two weeks of the survey.

Table 2 – Survey Personnel On-site During the Last Two Weeks of September 2002

•	Week of Sept. 16th	Week of Sept. 23rd
Airborne System		
Pilot	1	
Backseat Data Acquisition	1	
Data QC and Preprocess	1	
Field Support	1½	
Vehicular System		
Vehicle Driver	1	1
Data QC and Preprocess	3/4	3/4
Tribal Field Support	3	3
Field Support	1/2	1
Man-portable System		
Operator	1	1
Tribal Field Support	1	1
Data QC and Preprocess	1/4	1/4

In addition to the on-site labor listed above, approximately one man-week of effort was expended in Washington for the actual target selection and fitting. In this case we had the luxury of performing this analysis in the office, and thus saving the travel and per diem that would have been associated with target selection in the field, as there was no immediate remediation planned. In previous surveys we have selected targets on-site and coordinated with contemporaneous remediation.

Survey Activity Log

A schedule of overall survey activity is given in Table 3. Details of the individual platform surveys are listed in Tables 4 and 5. The actual survey performance matched closely the proposed schedule in the Survey Test Plan. The only significant deviations were the late arrival of the office trailer due to rain at the site, two days of weather delay for the airborne system caused by high winds, and four days delay in starting the man-portable survey due to late delivery of the equipment and subsequent failure of the rental data logger. There were no significant cost impacts due to these delays, the airborne schedule always includes weather contingencies and the man-portable surveying was made up by working both the vehicular and man-portable systems on Sunday, September 22.

Table 3 – Overall Survey Activities for the MTADS Survey at the BBR Impact Area

Date	Activity
Tues, Aug 26 th	Pick up trailer and begin packing equipment
Thurs, Sept 5 th	Trailer leaves Blossom Point for BBR
Wed, Sept 11 th	Trailer arrives BBR, Ellsworth personnel meet and locate equipment
Thurs, Sept 12 th	Logistics items begin to arrive at Impact Area
Sun, Sept 15 th	MTADS personnel arrive Impact Area Unpack and charge batteries; test vehicular system
Mon, Sept 16 th	Office trailer arrives at Impact Area Begin vehicular survey Begin assembly of airborne system Helicopter arrives at Impact Area
Tues, Sept 17 th	Outfit helicopter; initial calibration flight
Wed, Sept 18 th	Airborne weather day
Thurs, Sept 19 th	VIP Visit day Begin airborne surveys
Fri, Sept 20 th	Partial airborne weather day
Sat, Sept 21st	Begin man-portable surveys
Sun, Sept 22 nd	Complete airborne surveys; disassemble airborne system
Mon, Sept 23 rd	Helicopter departs Impact Area Continue vehicular and man-portable surveys
Thurs, Sept 26 th	Complete vehicular and man-portable surveys; pack trailer
Fri, Sept 27 th	MTADS personnel depart Impact Area
Tues, Oct 1st	Logistics and trailer depart Impact Area
Fri, Oct 4 th	Trailer arrives at Blossom Point; unpack
Tues, Oct 22 nd	Return trailer
Tues, Nov 5 th	Data analysis and target reports complete

Table 4 – Detail of the Airborne Survey

D-4-	EU-L4	C	Acres		Flight Hours			
Date	Flight	Survey File(s) Cov	Covered	Mob	Cal/Test	Ferry	Survey	Total
15-16 Sept	1 - 9			13.2				13.2
17 Sept	10					0.3		
•	11				0.3			
	12					0.2		
	Total							0.8
18 Sept	13					0.4		
	14				0.6			
	15				0.4			
	16					0.3		
	Total	0.00 (1.00)	10					1.7
19 Sept	17	02261001	40			0.3	0.7	
	18	02261002	80				1.3	
	19	02261003/004	90				1.7	
	20	02261005/006	90			0.2	2.0	
	21		200			0.3		(2
20.5	Total	022 (2001	300			0.2	0.2	6.3
20 Sept	22	02262001	discard			0.3	0.3	
	23	02262002/003	80				1.8	
	24 25	02262004/005	60			0.3	1.2	
	Total		140			0.3		3.9
21 Sept	26	02263001/002/003	80			0.3	1.8	3.9
21 Sept	27	02263004/005/006	90			0.5	2.2	
	28	02263007/008	30				1.1	
	29	02263009	60				1.1	
	30	02263010	55				1.2	
	31					0.3		
	Total		315					8
22 Sept	32	02264001/002/003				0.3	1.4	
1	33	02264004/005	50				1.3	
	34	02264006/007/008					1.2	
	35					0.3		
	Total		50					4.5
23-24 Sept				13.2				13.2
Total			805	26.4	1.3	3.6	20.3	51.6

Table 5 – Detail of the Vehicular and Man-Portable Surveys

Date	Vehicular		Man-Portable	
	Data File	Hours	Data File	Hours
15 Sept	02258001	0.07		
16 Sept	02259001	1.02		
	02259002	1.08		
	02259003	0.63		
	Total	2.73		
17-Sep	02260001	1.38		
	02260002	0.57		
	02260003	0.50		
	02260004	0.42		
	02260005	0.70		
	02260007	0.82		
	02260008	1.10		
	Total	5.49		
18-Sep	02261001	0.28		
	02261002	0.47		
	02261003	1.25		
	02261004	0.77		
	02261005	0.42		
	02261006	0.1		
	02261007	0.4		
	Total	3.69		
19-Sep	02262001	1.30		
	02262002	0.53		
	02262003	0.53		
	02262004	0.58		
	Total	2.94		
20-Sep	02263001	0.53		
	02263002	0.95		
	02263003	0.28		
	02263004	0.73		
	02263005	0.30		
	02263006	0.43		
	02263007	0.67		
	02263008	0.30		
	02263009	0.20		
	02263010	0.20		
21.6	Total	4.59	02264001	0.40
21-Sep	02264001	0.42	02264001	0.48
	02264002	0.23	02264002	0.17
	02264003	0.50	02264003	0.57
	02264004	0.87	02264004	0.25
	02264005	0.72		
	02264006	0.70		

Data File	Date	Vehicular		Man-Portable	
Total 3.97 Total 1.47		Data File	Hours	Data File	Hours
1.08	21-Sep	02264007	0.53		
02265002	•	Total	3.97	Total	1.47
02265003	22-Sep	02265001	1.08	02265001	0.32
O2265004 1.23 Total 0.32 23-Sep 02266001 0.33 02266002 0.28 02266002 0.87 02266002 0.28 02266003 0.05 02266003 0.27 02266004 0.98 02266005 0.47 02266005 0.47 02266005 0.43 02266006 1.02 02266006 0.27 02266007 1.55 02266007 0.03 02266008 0.22 02266008 0.22 02266009 0.42 Total 5.91 Total 2.34 24-Sep 02267001 1.30 02267002 0.18 02267002 1.13 02267002 0.18 02267003 0.82 02267003 0.22 02267004 0.85 02267004 0.50 02267006 0.28 Total 1.70 25-Sep 02268001 1.25 02268001 0.37 02268003 1.27 02268003 0		02265002	0.68		
Total 3.27 Total 0.32 23-Sep 02266001 0.33 02266002 0.28 02266003 0.05 02266003 0.27 02266004 0.98 02266004 0.47 02266005 0.47 02266005 0.43 02266006 1.02 02266006 0.27 02266007 1.55 02266007 0.03 02266008 0.22 02266008 0.22 02266009 0.42 0.22 02266008 0.22 02267001 1.30 02267001 0.58 02267002 1.13 02267002 0.18 02267003 0.82 02267003 0.22 02267004 0.85 02267004 0.50 02267006 0.28 0.28 0.26 Total 5.51 Total 1.70 25-Sep 02268001 1.25 02268001 0.37 02268003 1.27 02268003 0.12 02268005		02265003	0.28		
23-Sep		02265004	1.23		
02266002 0.87 02266002 0.28					
02266003 0.05 02266003 0.27 02266004 0.98 02266004 0.47 02266005 0.47 02266005 0.43 02266006 1.02 02266006 0.27 02266007 1.55 02266007 0.03 02266009 0.42 Total 5.91 Total 2.34 24-Sep 02267001 1.30 02267001 0.58 02267002 1.13 02267002 0.18 02267003 0.82 02267003 0.22 02267004 0.85 02267004 0.50 02267005 1.13 02267005 0.22 02267006 0.28 Total 5.51 Total 1.70 25-Sep 02268001 1.25 02268001 0.37 02268002 1.58 02268002 0.17 02268003 1.27 02268004 0.58 02268004 0.38 02268005	23-Sep	02266001		02266001	0.37
02266004 0.98 02266005 0.47 02266005 0.47 02266005 0.43 02266006 1.02 02266006 0.27 02266007 1.55 02266007 0.03 02266009 0.42 Total 5.91 Total 2.34 24-Sep 02267001 1.30 02267001 0.58 02267002 1.13 02267002 0.18 02267003 0.82 02267003 0.22 02267004 0.85 02267004 0.50 02267005 1.13 02267005 0.22 02267006 0.28 Total 5.51 Total 1.70 25-Sep 02268001 1.25 02268001 0.37 02268002 1.58 02268002 0.17 02268003 1.27 02268003 0.12 02268004 1.12 02268004 0.58 02268005 0.38 02268006		02266002	0.87	02266002	0.28
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26-Sep 02269001 0.82 02269001 0.23 02269002 1.30 02269002 0.43 02269003 0.12 02269003 0.18 02269004 0.22 02269004 0.18 02269005 0.43 02269005 0.48 02269006 0.13 02269007 0.07 02269008 0.23		75.4.1	7.60		
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02269006 0.13 02269007 0.07 02269008 0.23					
02269007 0.07 02269008 0.23		02209003	0.43		
02269008 0.23					
		Total	2.89		
Totals 170 acres 46.67 4 acres 10.00	Totals				

SURVEY RESULTS

Survey Coverage

The 2001 Airborne MTADS survey of the impact area covered 1685 acres, leaving approximately 800 acres unsurveyed. This unsurveyed area was primarily on the lower level of the site near the White River but includes some of the deep ravines in the Northeastern corner of the site and a broad, level bowl also in the Northeast. The lower level of the site is composed of treed sections not amenable to airborne survey but appropriate for vehicular surveys and some areas on banks and sandbars by the river that require man-portable coverage. A coverage map of the combined 2001 and 2002 surveys is shown in Figure 10 with each of the platform's coverage delineated by color.

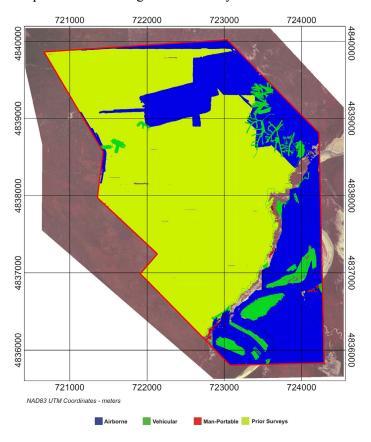


Fig. 10 – Survey coverage of the Impact Area by survey platform

As can be seen from the figure, the only area left uncovered by the combined surveys is the approximately 50 acres that comprise the escarpment. At several places along the escarpment there is an intermediate level of roughly flat ground that was covered by the man-portable system. The terrain in the rest of this area is extremely steep and was not covered in this survey.

More detail of the coverage in the 2002 survey is shown in Figure 11, which shows the southwest corner of the Impact Area. In this figure one can clearly see the treed area covered by the vehicular system, the portion of the escarpment covered by the man-portable system, and a sandbar by the river that was also covered by the man-portable system. Also shown in the top left of the figure is a one-pass vehicular survey used to define the absolute limit of the upper portion of the site. We used this boundary

to insure that the airborne system covered the upper site completely. Notice in Figure 11 that we had to fill in a small area on the upper level with the vehicle. This small area is in the shadow of a group of trees growing on the escarpment which prevented the airborne system from getting low enough for effective surveying. Apart from this one area, the entire boundary was effectively covered by the airborne system.



Fig. 11 – Detail of the SW corner of the site showing coverage by platform

We were fortunate in this survey that the tree coverage on the lower level of the site was sufficiently sparse to allow high-quality GPS fixes to be obtained. This made a vehicular survey of these areas relatively straightforward. A photograph of the vehicular system surveying in the southwestern most area from Figure 11 is shown in Figure 12.



Fig. 12 – MTADS vehicular system surveying in the trees on the lower level of the site

There was a considerable amount of driftwood obstruction on the lower level of the site that would have hindered a vehicular survey. Most of this driftwood was cleared and stacked by the Ellsworth AFB grounds crew before the MTADS mobilized to the site, Figure 13. In one area at the North end of the



Fig. 13 – Driftwood cleared and stacked by the Ellsworth grounds crew

lower level, MTADS field personnel placed the wood inline with the trees to minimize its interference, Figure 14.



Fig. 14 – Driftwood cleared by the MTADS field crew

As mentioned above, the majority of the upper level of the site was covered by the airborne system. The only exceptions were the deep ravines on the eastern and western edges of the site that were covered by the vehicular system, Figure 15, and a small ravine in the far northwestern corner of the site that was covered by the man-portable system, Figure 16. Approximately half of the ravines were narrow enough that a few vehicular passes around the centerline were sufficient to fill in the gaps in the airborne survey. This was most often the case on the eastern side of the site. The remainder of the ravines were wide enough that it was most efficient to set up a rectangular survey area irrespective of the topography of the ravine. A number of these latter surveys tested the limits of the vehicular system in that the sensor platform was at such a steep angle the magnetometers were outside their active zones and began to drop out. Fortunately, there are subtle differences among the individual magnetometers that make them drop

out at slightly different angles. In all cases, we had at least six of the eight magnetometers active on each survey line that was judged as acceptable for analysis use.



Fig. 15 – The MTADS vehicular system surveying the ravines on the upper level of the site



Fig. 16 – MTADS man-portable system in use in the far northeastern corner of the site

Target Analysis

The survey data was broken into two halves for analysis convenience. The target tables that result from the analysis are included as Appendix B. The analysis criteria were the same as those used in the 2001 survey: anomalies were analyzed consistent with the presence of 105-mm, 155-mm, and 8-in projectiles on the site. Thus, small pieces of frag and scrap were not included in the analysis. All survey data from both the 2001 and 2002 surveys are included as appendices on the attached CDs. Inclusion of the 105-mm projectiles in the target list results in a substantially larger target list than would be necessary without the 105-mms. For consistency with the analysis of the 2001 survey data, we include these projectiles as possible targets, even though we have not identified a single 105-mm in over 1500 digs.

Targets that result from the vehicular or man-portable data are indicated by shading in the target tables. Targets that appeared in two data sets are grouped together and indicated by double lines. The selected targets were classified by the analyst into one of six categories: 1 for high confidence UXO, 2 for medium confidence UXO, 3 for low confidence UXO, 4 for low confidence clutter, 5 for medium

confidence clutter, and 6 for high confidence clutter. A summary of the distribution of targets among these six categories is given in Table 6.

Table 6 – Distribution of Targets by UXO Classification

UXO Classification	North	South	Total
1	20	33	53
2	60	70	130
3	77	107	184
4	52	80	132
5	81	70	151
6	320	173	493
Total	610	533	1143

An example of a target that appeared in two data sets is shown in Figure 17. The left half of the figure shows the airborne data for the target that was analyzed as target 164 in the South portion of the site. The right half of the figure shows the vehicular data over the same target, which was designated target V74 in the vehicular analysis. As can be seen from the figure, the data are of equivalent quality in the two surveys. The primary difference is the larger size of the anomaly in the airborne survey; this is the result of the airborne sensors being 1 to 1.5 m above the ground vs. the 0.25 m height of the vehicular sensors. Of course, the data density is higher in the vehicular data set that leads, in some cases, to slightly different fit results or analyst's classification.

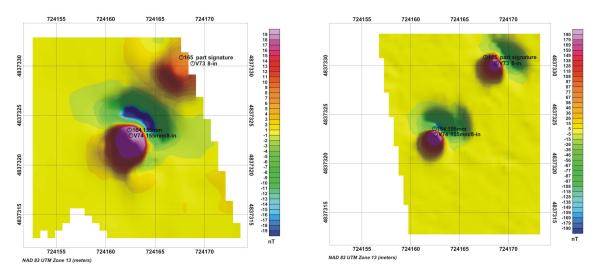


Fig. 17 - Comparison of airborne (left half) and vehicular (right half) data over a target in the South portion of the site

Two example target fits are shown in Figures 18 and 19. Figure 18 shows a target that was classified as high confidence UXO. This target is in a near-vertical orientation; only one lobe of the signature is visible. Its model estimated size is appropriate for a 155-mm projectile and the depth of 0.36 m is reasonable. Target 48, Figure 19, exhibits an inverted signature which is a consequence of a large remenant magnetic moment. In addition, its estimated size is too large for an 8-in projectile. For these two reasons, it was assigned to confidence category 5.

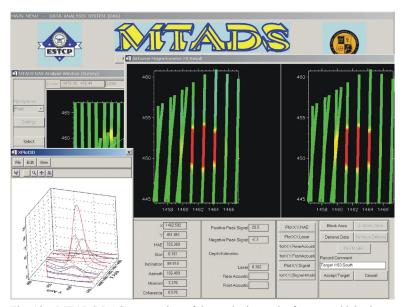


Fig. 18 – MTADS DAS screen shot of the analysis results for target 83 in the South portion of the site. The middle portion of the screen shows the survey data, the right portion the model fit with the estimated target parameters in the boxes below, and the left portion a 3-D view of the data.

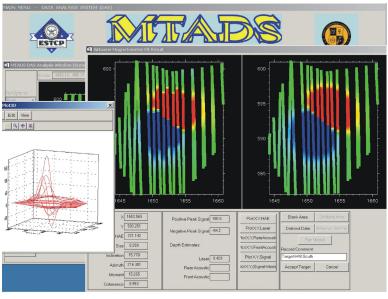


Fig. 19 – MTADS DAS screen shot for target 48 South. The elements are the same as those in Figure 18.

Over 40% of the targets in the combined target tables are classified as confidence category 6. A large majority of these category 6 targets are associated with the fence around the Impact Area. Many of them correspond to old fence posts that have fallen to the ground or the current fence posts themselves. Since these items give model fits in the range of sizes appropriate for the targets of interest in this survey, they must be included in the table. Their positions and regularity allow them to be assigned to category 6. An example of these targets is shown in Figure 20.

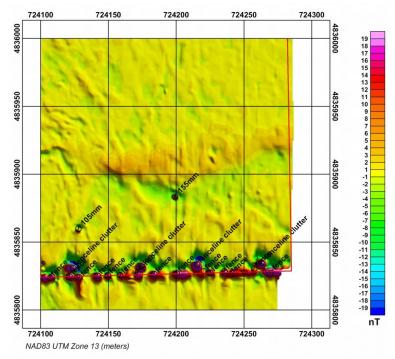


Fig. 20 – Survey data along the fence line showing examples of the large number of targets classified as related to the present or past fences as well as two more likely targets

SURVEY COSTS

2002 Survey

The costs associated with the 2002 survey are detailed in Table 7. Two points should be noted about these costs. This was a fill-in survey in which the area not covered in the 2001 survey was completed. This implies that much of the survey work was around tree lines and cliffs, repeats of missing data, and completion of small areas with short survey lines. All these factors lead to relatively inefficient surveying in terms of acres covered per hour. Second, since only about 750 acres were covered in this survey, the costs for mobilization and logistics (which are dominated by delivery of the logistics items to the site, not the weekly charges) are not amortized over very many acres. Thus, the per acre costs for the 2002 survey are quite high. In the next section, the incremental costs for the 1685 acres surveyed in 2001 are added and result in a much more realistic cost per acre. Bear in mind that these costs do not include remediation, which, in our experience, averages \$200 per item investigated nor any costs associated with equipment amortization since this is a government-owned system.

Table 7 – Survey Costs for the 2002 Survey at the Impact Area

Activity	Item Cost	Sub-total
Mobilization/Demobilization:		\$47,800
Test Plan Preparation	\$5,300	
Equipment Prep and Packing/Unpacking	\$5,000	
Rental Trailer	\$1,000	
Transportation of Trailer	\$11,000	
Helicopter Mobilization	\$18,500	
Travel for 7 workers	\$7,000	
Logistics:		\$14,600
Office and Garage Trailers	\$3,200	
Generator/Fuel/Electrician	\$6,400	
Portable Toilets	\$1,000	
Materials and Supplies	\$4,000	
Survey Operations:		\$90,400
Rental Vehicles	\$4,000	
Supervisor (2 weeks)	\$10,600	
Technician (2 weeks)	\$5,000	
Analysts (2.5 x 2 weeks)	\$18,800	
Helicopter Back Seat Analyst (1 week)	\$4,700	
Per diem (69 person-days)	\$5,200	
Helicopter	\$17,600	
Pilot Expenses (10 days)	\$1,000	
Jet A Fuel	\$6,500	
Tribal Support	\$17,000	
Analysis and Reporting:		\$26,400
Data Analysis (1 week)	\$6,400	
Target Lists and Final Report	\$20,000	
Total Survey Costs		\$179,200
Cost per acre (750 acres)		\$240

Combined 2001 and 2002 Survey

A more realistic estimate of costs for a combined geophysical survey of this type would combine the costs in Table 7 with the costs of the airborne survey of 1685 acres performed by MTADS in 2001. These combined costs for coverage of the 2435 accessible acres are detailed in Table 9. There were many concurrent operations underway in 2001, only those costs directly attributable to the airborne survey are included. As one can see from Table 9, the costs per acre for the combined 2001 and 2002 surveys were roughly \$100 per acre. The Impact Area is not an extraordinarily difficult site but does have treed areas and an escarpment running diagonally across the site. Accordingly, these costs should be applicable to a wide array of ranges in the Western United States.

REMEDIATION REQUIRED

As a result of this survey, we have identified 499 targets classified as UXO category 1 through 4 and 650 targets in categories 1 through 5. Obviously any remediation effort would begin with targets in categories 1 through 3 and expand the list based on experience with the first digs. In our 2001 survey and partial remediation at this site, we achieved a 94% recovery of UXO and emplaced inerts by digging through category 4 and a 97% recovery digging through category 5.

In addition to these 2002 targets, there are approximately 900 targets on the dig lists from our surveys in 1999 and 2001 that remain to be excavated. As detailed in Table 8, they include the unremediated targets from 2001, a number of targets identified in the 1999 survey that were not dug, targets from the 2001 survey where nothing was recovered, or the object found was too small to produce the analyzed anomaly, and forty targets added when the data were reanalyzed in a retrospective study following completion of survey activities.

Table 8 – Identified Targets Remaining Unexcavated at the BBR Impact Area

Target Source	Number of Targets
1999 Survey, West Area	15
1999 Survey, North Area	68
2001 Targets Not Remediated	666
2001 'Missed' Targets	83
2001 Picks After Leaving Site	40
Total	872

In addition to the targets enumerated in Table 8, there is one additional relatively small area that requires attention. The target density in the 1999 bull's eye is so great that a re-survey may be required after the targets listed in Table 9 are excavated. If this is necessary to ensure that all UXO is removed from the region of the bull's eye, a hand mag-and-flag survey by the remediation crew will suffice.

Table 9 – Total Survey Costs for the 2001 Airborne and 2002 Combined Surveys at the Impact Area

Activity	Item Cost	Sub-total
Mobilization/Demobilization:		\$48,800
Test Plan Preparation	\$5,300	
Equipment Prep and Packing/Unpacking	\$5,000	
Rental Trailer	\$1,000	
Transportation of Trailer	\$11,000	
Helicopter Mobilization	\$18,500	
Travel for 8 workers	\$8,000	
Logistics:		\$14,600
Office and Garage Trailers	\$3,200	
Generator/Fuel/Electrician	\$6,400	
Portable Toilets	\$1,000	
Materials and Supplies	\$4,000	
Survey Operations:		\$133,600
Rental Vehicles	\$6,000	
Supervisor (2 weeks)	\$10,600	
Technician (2 weeks)	\$5,000	
Analysts (3.5 x 2 weeks)	\$26,300	
Helicopter Back Seat Analyst (2 weeks)	\$9,400	
Per diem (83 person-days)	\$6,300	
Helicopter	\$41,800	
Pilot Expenses (14 days)	\$1,400	
Jet A Fuel	\$9,900	
Tribal Support	\$17,000	
Analysis and Reporting:		\$37,800
Data Analysis (2 weeks)	\$12,800	
Target Lists and Final Report	\$25,000	
Total Survey Costs		\$234,800
Cost per acre (2435 acres)		\$96

REFERENCES

1. "Hand-held Gradiometer Survey Test at The Marine Corps Air Ground Combat Center, Twentynine Palms, CA," NAVEODTECHCEN TR, September 1992. This report describes hand-held gradiometer surveys of the MCAGCC Magnetic Test Range conducted by military EOD teams. Their ordnance detection efficiency varied between 25 and 35%.

- 2. "MTADS TECHEVAL Demonstration, October 1996," H. H. Nelson, J. R. McDonald, and Richard Robertson, NRL/PU/6110--97-348.
- 3. "Results of the *MTADS* Technology Demonstration #2, Magnetic Test Range, Marine Corps Air Ground Combat Center, Twentynine Palms, CA, December 1996," J. R. McDonald, H. H. Nelson, R. A. Jeffries, and Richard Robertson, NRL/PU/6110--97-349.
- 4. "Results of the *MTADS* Technology Demonstration #3, Jefferson Proving Ground, Madison, IN, January 13-24, 1997," H. H. Nelson, J. R. McDonald, R. A. Jeffries, and Richard Robertson, NRL/PU/6110--99-375.
- 5. "MTADS Unexploded Ordnance Operations at the Badlands Bombing Range, Pine Ridge Reservation, Cuny Table, SD, July 1997," J. R. McDonald, H. H. Nelson, J. Neece, Richard Robertson and R. A. Jeffries, NRL/PU/6110--98-353.
- 6. "MTADS Demonstration at the Former Ft. Pierce Amphibious Base, Vero Beach, FL, March 1998," J. R. McDonald, H. H. Nelson, R. A. Jeffries, Richard Robertson, and K. Blankinship, NRL/PU/6110-98-372.
- 7. "MTADS Live Site Survey, Bombing Target #2 at the Former Buckley Field, Arapahoe County, CO," J. R. McDonald, H. H. Nelson and R. Robertson, NRL/PU/6110--99-379.
- 8. "MTADS Geophysical Survey at The Jamaica Island and Topeka Pier Landfills at The Portsmouth Naval Shipyard, Kittery, ME, October 1998," J. R. McDonald, H. H. Nelson and B. Puc, NRL/PU/6110--99-381.
- 9. "MTADS Live Site Demonstration, Pueblo of Laguna, 6 July 7 August 1998," J. R. McDonald, H. H. Nelson and R. A. Jeffries, NRL/PU/6110--00-398.
- 10. "MTADS UXO Survey and Remediation on the Walker River Paiute Reservation, Schurz, NV, November 1998," J. R. McDonald, H. H. Nelson, and R. A. Jeffries, NRL/PU/6110--00-406.
- 11. "MTADS Unexploded Ordnance Operations at the Badlands Bombing Range Air Force Retained Area, Pine Ridge Reservation, SD, September, 1999," J. R. McDonald, H. H. Nelson, R. Robertson, and R. A. Jeffries, NRL/PU/6110--00-424.
- 12. "MTADS Geophysical Survey of Potential Underground Storage Tank Sites at the Naval District Washington, Anacostia Annex," H. H. Nelson, J. R. McDonald, R. Robertson, and B. Puc, NRL/MR/6110--00-8435.
- 13. ESTCP Cost and Performance Report. *Multi-Sensor Towed Array Detection System*. September 1999. http://www.estcp.org/documents/techdocs/199526.pdf

- 14. "Preliminary Assessment/Site Inspection Report, Badlands Bombing Range-Impact Area;" Ellsworth AFB, SD; Draft-Final; U.S. Air Force Air Combat Command; Prepared for U.S. Army Corps of Engineers under Contract No. DACW 45-94-D-0001, Delivery Order 26, Project Number FXBM 98-7006, Rust Environmental & Infrastructure, January 1999
- 15. "Airborne *MTADS* Demonstration on the Impact Area of the Badlands Bombing Range, September 2001," J. R. McDonald, H. David Wright, Nagi Khadr, and H. H. Nelson, NRL/PU/6110--02-453.

Appendix A

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Appendix B

MTADS TARGET TABLES

Targets that result from the vehicular or man-portable data are indicated by shading in the following tables. Targets that appeared in two data sets are grouped together and indicated by double lines. The selected targets were classified by the analyst into one of six categories: 1 for high confidence UXO, 2 for medium confidence UXO, 3 for low confidence UXO, 4 for low confidence clutter, 5 for medium confidence clutter, and 6 for high confidence clutter.

Table B1 – MTADS Target Table for the North Section of the Site

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Depth Caliber (m)		Fit Quality	Mom. Fit Analyst Comments UXO Class.	UXO Class.	UXO Local X Local Y Class. (m) (m)	Local Y (m)	Latitude	Longitude
85	722594.15	722594.15 <mark> </mark> 4839963.27 738.31	738.31	0.15	0.105	0.667	0.924	105mm	1	175.25	2478.46	43.679324710	175.25 2478.46 43.679324710 -102.238496665
186	723146.14	186 723146.14 4839849.13 745.44	745.44	0.10	0.109	0.740		0.945 105mm	1	727.24	2364.31	43.678132573	727.24 2364.31 43.678132573 -102.231703729
256		723101.92 4839390.88 759.73	759.73	1.90	0.233	7.246	0.915	8-in	_	683.01	1906.06	43.674024595	1906.06 43.674024595 -102.232441347
258		722980.59 4839388.98 761.47	761.47	0.28	0.219	6.010	0.962	8-in on the surface	1	561.68		43.674043973	1904.17 43.674043973 -102.233945478
260		722838.26 4839378.76 758.47	758.47	1.97	0.221	6.145	0.914	pretty good 8-in @ 2 meters	1	419.36	1893.95	43.673994740	1893.95 43.673994740 -102.235713230
352	723406.66	352 723406.66 4839107.12 758.60	758.60	0.80	0.184	3.552		0.973 155mm @ 2ft	1	987.75	1622.31	43.671381099	987.75 1622.31 43.671381099 -102.228782952
437		723600.04 4839054.09 741.71	741.71	0.79	0.172	2.923	0.843	155mm/8in @ 2 ft	1	1181.14	1569.28	43.670846002	1181.14 1569.28 43.670846002 -102.226408894
438		723505.56 4839058.24 755.25	755.25	1.51	0.267	0.267 10.833	0.896	8in @ 4 ft	1	1086.66		43.670911736	1573.43 43.670911736 -102.227577772
448	722575.82	448 722575.82 4839091.56 761.42	761.42	0.80	0.105	0.663		0.970 105mm	1	156.92	1606.75	43.671490432	156.92 1606.75 43.671490432 -102.239083558
468	722151.83	468 722151.83 4839008.37 762.70	762.70	0.26	660'0	0.555	0.924	105mm	1	-267.08	1523.56	43.670869150	-267.08 1523.56 43.670869150 -102.244371170
472		723662.97 4838976.32 745.60	745.60	0.39	0.194	4.193	0.968	155mm/8-in @ 1 ft	1	1244.07	1491.51	43.670127647	1491.51 43.670127647 -102.225661455
490	722145.51	490 722145.51 4838923.18 762.21	762.21	0.71	0.129	1.227		0.981 105mm	1	-273.39	1438.37	43.670104871	-273.39 1438.37 43.670104871 -102.244484505
491		722116.58 4838922.91 761.79	761.79	0.72	0.098	0.540	0.893	105mm	1	-302.32	1438.10	43.670111068	-302.32 1438.10 43.670111068 -102.244843023
523		723431.87 4838763.95 759.28	759.28	0.11	0.148	1.851	0.958	155mm	1	1012.97	1279.14	43.668287216	1279.14 43.668287216 -102.228612681
526	723500.68	723500.68 4838758.88 757.46	757.46	0.00	0.160	2.324	0.954	155mm, dig this	1	1081.77	1274.07	43.668220938	1081.77 1274.07 43.668220938 -102.227762315
545	723842.92	723842.92 4838719.09 753.95	753.95	3.87	0.308	0.308 16.673	0.917	two targets dig as a deep 8-in	~	1424.02	1234.28	43.667760122	1424.02 1234.28 43.667760122 -102.223538615
558	723459.16	558 723459.16 4838661.80 759.99	759.99	0.78	0.179	3.306	3.306 0.954	155mm	1	1040.26	1176.98	43.667360280	1040.26 1176.98 43.667360280 -102.228316844

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V13	723444.91	V13 723444.91 4839409.85		0.83	0.137	1.471	0.962	155mm, not an Hmag target	1	1026.01	1925.04	43.674092171	1925.04 43.674092171 -102.228183594
V29	723733.83	V29 723733.83 4838513.64		0.18	0.098	0.530	0.957	105mm, no Hmag data	_	1314.93	1028.83	43.665945250	1314.93 1028.83 43.665945250 -102.224975359
V17	723466.24	V17 723466.24 4839116.19		09:0	0.097	0.521	0.921	105mm, not an Hmag pick	1	1047.34	1631.37	43.671444724	1047.34 1631.37 43.671444724 -102.228040907
191	722902.70	722902.70 4839786.33 741.87	741.87	1.82	0.165	2.567	0.944	deep 155mm	2	483.79	2301.51	43.677640864	2301.51 43.677640864 -102.234746388
201	723017.06	723017.06 4839733.59 745.58	745.58	0.24	0.107	0.707	0.901	105mm	2	598.16	2248.78	2248.7843.677132301	-102.233351000
202	722926.72	722926.72 4839744.52 742.72	742.72	1.94	0.166	2.613	0.940	deep 155mm	2	507.82	2259.70	43.677257641	507.82 2259.70 43.677257641 -102.234465918
203	722911.44	203 722911.44 4839708.53 744.94	744.94	0.27	0.097	0.515	0.865	pretty good 105mm	2	492.54	2223.72	43.676938605	492.54 2223.72 43.676938605 -102.234670158
216	723361.24	723361.24 4839601.72 760.53	760.53	93.0	0.109	0.733	0.921	possible 105mm	2	942.34	2116.91	43.675842907	942.34 2116.91 43.675842907 -102.229140844
217	723314.30	723314.30 4839637.27 759.52	759.52	1.41	0.204	4.844	0.835	possible 8-in	2	895.39	2152.46	43.676176784	2152.46 43.676176784 -102.229707790
218	723172.00	723172.00 4839587.28 758.15	758.15	0.28	0.230	6.939	0.929	possible 8-in	2	753.10		43.675769937	2102.47 43.675769937 -102.231491708
220		723151.27 4839565.08 758.62	758.62	0.71	0.171	2.883	0.926	possible 8-in	2	732.37		43.675576482	2080.27 43.675576482 -102.231757695
221	723013.46	723013.46 4839556.08 757.44	757.44	2.44	0.279	12.409	0.905	possible 8-in	2	594.56	2071.27	43.675536936	2071.27 43.675536936 -102.233469080
224		723562.81 4839488.76 746.76	746.76	1.36	0.193	4.080	0.755	good target partial signature	2	1143.91	2003.94	43.674766350	2003.94 43.674766350 -102.226689984
227	723222.54	723222.54 4839516.36 759.29	759.29	2.25	0.162	2.425	0.968	deep 155mm	2	803.64	2031.54	43.675116879	2031.54 43.675116879 -102.230894797
229	723139.78	229 723139.78 4839475.10 759.84	759.84	2.25	0.178	3.219	0.862	deep 155mm	2	720.87		43.674770681	1990.29 43.674770681 -102.231937375
231	723020.91	723020.91 4839506.37 759.79	759.79	1.68	0.156	2.158	0.915	155mm	2	602.00	2021.55	43.675087585	602.00 2021.55 43.675087585 -102.233397366
232	722985.59	722985.59 4839515.35 760.64	760.64	1.26	0.116	0.883	0.902	105mm	2	566.69	2030.53	43.675178922	2030.53 43.675178922 -102.233831263
233		722986.48 4839475.25 761.29	761.29	0.53	0.115	0.867	0.944	105/155mm	2	567.58		43.674818088	1990.44 43.674818088 -102.233836760
242	723499.99	723499.99 4839437.04 758.56	758.56	1.13	0.118	0.934	0.932	105mm	2	1081.08		43.674320130	1952.22 43.674320130 -102.227489896
246	723414.55	246 723414.55 4839448.87 760.14	760.14	1.06	0.116	0.884	0.953	105mm	2	995.65	1964.06	43.674452247	1964.06 43.674452247 -102.228543592
717	723414.51	V14 723414.51 4839448.44		0.66	0.093	0.458	0.789	105mm, part signature, Hmag 246	2	995.61	1963.63	43.674448366	995.61 1963.63 43.674448366 -102.228544228
257	723086.73	723086.73 4839350.25 759.53	759.53	2.13	0.215	5.689	0.907	8-in	2	667.83	1865.44	43.673663810	1865.44 43.673663810 -102.232646265
261	722841.35	722841.35 4839350.96 759.77	759.77	1.64	0.159	2.306	0.873	155mm @ 1.6m	2	422.45		43.673743782	1866.15 43.673743782 -102.235686401
265	722769.09	265 722769.09 4839345.91 757.39	757.39	1.66	0.279	0.279 12.375		0.936 possible 8-in	2	350.19	1861.10	43.673720057	350.19 1861.10 43.673720057 -102.236583856

Targ ID	X MTU (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мош.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
267	722589.13	722589.13 4839378.78 747.44	747.44	98.0	0.131	1.297	0.945	155mm	2	170.23	1893.97	43.674069573	1893.97 43.674069573 -102.238800113
281	723618.20	723618.20 4839240.05 741.70	741.70	1.04	0.121	1.005	0.929	155mm	2	1199.30	1755.23	43.672512925	1755.23 43.672512925 -102.226106763
284	723543.23	723543.23 4839262.58 747.32	747.32	1.17	0.205	4.901	0.985	possible 8-in	2	1124.33	1777.77	43.672738162	1777.77 43.672738162 -102.227026321
285		723545.86 4839232.46 744.54	744.54	2.66	0.250	8.945	0.905	8-in	2	1126.95	1747.65	43.672466508	1747.65 43.672466508 -102.227006322
295		722545.60 4839231.72 754.51	754.51	2.50	0.186	3.680	0.938	8-in	2	126.70	1746.90	43.672759998	1746.90 43.672759998 -102.239400114
330	722717.46	722717.46 4839193.68 757.22	757.22	0.83	0.203	4.778	0.897	8-in partial signature	2	298.56	1708.86	43.672366406	1708.86 43.672366406 -102.237286433
343	722331.46	722331.46 4839213.34 756.23	756.23	0.74	0.172	2.891	0.950	possible 155mm	2	-87.44	1728.53	43.672658826	1728.53 43.672658826 -102.242060995
399		722356.28 4839147.64 759.02	759.02	1.12	0.138	1.501	0.935	possible 155mm	2	-62.62	1662.83	43.672060510	1662.83 43.672060510 -102.241780592
414	722208.39	722208.39 4839157.55 758.76	758.76	2.25	0.158	2.236	0.854	deep 155mm	2	-210.51	1672.73	43.672193856	1672.73 43.672193856 -102.243608854
435		723799.80 4839072.58 736.55	736.55	0.19	0.122	1.044	0.967	105mm on the surface	2	1380.89	1587.76	43.670952130	1587.76 43.670952130 -102.223926266
436		723661.94 4839092.52 740.07	740.07	98.0	0.107	0.697	0.941	deep 105mm	2	1243.03	1607.71	43.671173035	1607.71 43.671173035 -102.225626087
440	723454.48	723454.48 4839092.76 759.21	759.21	0.25	0.178	3.230	0.935	155mm or car parts on the surface	2	1035.57	1607.95	43.671237603	1607.95 43.671237603 -102.228196392
V18		723454.46 4839092.61		0.25	0.169	2.763	0.989	155mm, Hmag #440	1	1035.55	1607.80	43.671236225	1607.80 43.671236225 -102.228196729
454		722283.12 4839074.48 761.94	761.94	0.50	0.092	0.443	0.935	105mm	2	-135.79	1589.67	43.671424438	1589.67 43.671424438 -102.242717228
458	723596.54	723596.54 4839025.09 745.55	745.55	2.62	0.252	9.191	0.916	8-in @ 8 ft	2	1177.64	1540.28	43.670586244	1540.28 43.670586244 -102.226464287
459		723531.27 4839001.40 745.66	745.66	09.0	0.190	3.901	0.901	8-in @ 2ft	2	1112.37	1516.59	43.670392867	1516.59 43.670392867 -102.227282751
460	723470.22	723470.22 4839034.85 757.58	757.58	1.36	0.135	1.417	0.928	155mm	2	1051.32	1550.04	43.670712058	1550.04 43.670712058 -102.228025286
467	722285.39	722285.39 4839021.67 762.07	762.07	0.51	0.103	0.630	0.950	105mm	2	-133.51	1536.86	43.670948800	1536.86 43.670948800 -102.242710822
480	722202.48	722202.48 4838945.62 762.02	762.02	0.84	0.101	0.592	0.924	105mm	2	-216.42	1460.81	43.670289665	1460.81 43.670289665 -102.243769422
482	722182.10	722182.10 4838964.47 762.92	762.92	0.00	0.094	0.468	0.938	105mm	2	-236.80	1479.66	43.670465272	1479.66 43.670465272 -102.244014164
483		722173.37 4838971.91 762.73	762.73	0.22	0.117	0.919	0.951	105mm	2	-245.53	1487.09	43.670534729	1487.09 43.670534729 -102.244119219
488		722125.92 4838935.16 762.34	762.34	0.63	0.100	0.565	0.919	105mm in clutter	2	-292.98	1450.34	43.670218406	1450.34 43.670218406 -102.244722328
489		722140.93 4838926.71 762.37	762.37	0.63	0.099	0.559	0.886	105mm in clutter	2	-277.97	1441.90	43.670137959	1441.90 43.670137959 -102.244539827
499	723453.68	723453.68 4838886.74 757.31	757.31	1.31	0.159	2.314	0.853	possible 155mm	2	1034.78		43.669384944	1401.92 43.669384944 -102.228291575
518		723903.84 4838845.63 739.52	739.52	1.96	0.224	6.451	0.961	155mm @ 2 meters	2	1484.94	1360.81	43.668879739	1360.81 43.668879739 -102.222731333
525	723479.67	723479.67 4838757.38 754.34	754.34	0.59	0.185	3.620	0.917	155mm	2	1060.76	1272.56	43.668213735	1272.56 43.668213735 -102.228023205
528	723599.81	723599.81 4838745.81 756.20	756.20	2.16	0.243	8.210	0.760	8-in, dig this	2	1180.91		43.668073585	1261.00 43.668073585 - 102.226539456

UTM X UTM Y HAE D. (m) (m) (m) (m)	Depth Caliber Mc (m) (m)	Mom. Quality 5 749 0 916	Analyst Comments	UXO Class.	(m)	(m)	Latitude 13 668421664	Local Y
756.71 1.72				7 2	1319.04	1264.01	43.668059070	1294.09 43.06642 1664 - 102.2266036 13 1264.01 43.668059070 - 102.224826842
723923.28 4838736.12 756.26 1.29 0.208	5.	5.148 0.924	dig as an 8-in	2	1504.38	1251.31	43.667889064	1251.31 43.667889064 -102.222535908
723525.63 4838740.57 758.72 2.72 0.241	œ.	8.022 0.932	8-in with clutter to S	2	1106.73	1255.76	43.668048770	1106.73 1255.76 43.668048770 -102.227460713
723418.77 4838736.34 758.45 0.30 0.175	33.	3.067 0.965	155mm	2	98.86	1251.53	43.668042843	1251.53 43.668042843 -102.228786434
723419.32 4838702.21 756.92 0.70 0.141	Ψ.	1.604 0.912	155mm	2	1000.41	1217.39	43.667735699	1217.39 43.667735699 -102.228793785
723418.96 4838702.02 0.22 0.141		1.594 0.890	155mm, two objects side by side, Hmag #555	3	1000.06	1217.20	43.667734114	1217.20 43.667734114 -102.228798275
723703.40 4838612.03 757.26 2.43 0.244	ω.	8.272 0.941	dig as an 8-in	2	1284.49	1127.21	43.666839215	1127.21 43.666839215 -102.225311612
723711.58 4838586.28 756.08 2.51 0.212	5.	5.438 0.894	dig as an 8-in	2	1292.67	1101.47	43.666605230	1101.47 43.666605230 -102.225220964
723849.49 4838492.76 760.44 1.38 0.115	o.	0.880 0.930	105mm	2	1430.58	1007.95	43.665722615	1007.95 43.665722615 -102.223551190
723592.68 4839451.79 1.38 0.149 1		1.903 0.807	5mm, not an Hmag target	7	1173.77	1966.97	43.674424897	1966.97 43.674424897 -102.226335266
723452.88 4839382.06 1.76 0.176 3.		3.133 0.895	155mm in clutter, no Hmag data	7	1033.98	1897.24	43.673839818	1897.24 43.673839818 -102.228096330
723410.83 4838959.55 0.34 0.115 C		0.859 0.853	105mm, not an Hmag pick	2	991.92	1474.73	43.670052620	1474.73 43.670052620 -102.228792384
V25 723405.63 4838700.01 0.32 0.093 0		0.465 0.950	105mm, no Hmag data	2	986.73	1215.20	43.667720082	1215.20 43.667720082 -102.228964250
723409.24 4838538.43 0.31 0.092 0		0.446 0.905	105mm, no Hmag data	2	990.33	1053.61	43.666265785	1053.61 43.666265785 -102.228986442
723025.28 4839948.16 740.03 0.00 0.080 (0.294 0.946	small for 105mm	3	606.38	2463.34	43.679059494	2463.34 43.679059494 -102.233160425
722570.42 4839955.90 737.71 0.66 0.415 40		40.774 0.967	looks larger than 8in projo	3	151.51	2471.09	2471.09 43.679265550	-102.238793830
723100.69 4839820.05 745.89 0.24 0.082 0		0.312 0.885	small for a 105mm	3	681.79	2335.23	43.677884701	2335.23 43.677884701 -102.232278966
723181.53 4839810.46 745.22 1.01 0.131	<u>ا :</u> ا	1.273 0.866	possible 155mm	3	762.62	2325.64	43.677774180	2325.64 43.677774180 -102.231281285
723040.01 4839751.48 744.87 0.78 0.103	0	0.620 0.845	105mm	3	621.10	2266.66	43.677286240	621.10 2266.66 43.677286240 -102.233059311
723329.86 4839672.55 759.45 1.59 0.162	N,	2.436 0.927	inverted 155mm	3	910.96	2187.73	43.676489330	910.96 2187.73 43.676489330 -102.229500338
723399.62 4839603.35 759.37 1.60 0.129	.	1.234 0.888	unlikely 155mm	3	980.72	2118.53	43.675846002	2118.53 43.675846002 -102.228664580

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
219	722614.86	722614.86 4839612.82	744.62	1.07	0.176	3.093	0.824	unlikely 155mm	3	195.95	2128.00	43.676166694	2128.00 43.676166694 -102.238384746
226	723513.63	723513.63 4839473.09 752.65	752.65	5.23	0.245	8.451	0.589	possible 8-in	3	1094.73		43.674640280	1988.28 43.674640280 -102.227305900
228	723138.60	723138.60 4839507.55 758.32	758.32	2.02	0.250	8.884	0.969	ssible 8-in	3	719.70		43.675062875	2022.74 43.675062875 -102.231938530
230	723002.98	723002.98 4839517.68	759.43	2.65	0.228	6.747	0.779	low probability 8-in	3	584.08	2032.87	43.675194695	2032.87 43.675194695 -102.233614782
238	723615.44	723615.44 4839413.33 741.38	741.38	1.26	0.146	1.779	0.873	unlikely 155mm	3	1196.54	1928.52	43.674072212	1928.52 43.674072212 -102.226069187
240		723573.35 4839416.46 747.09	747.09	1.25	0.173	2.968	0.908	low probability 155mm	3	1154.44		43.674112966	1931.64 43.674112966 -102.226589448
244	723452.32	723452.32 4839413.12 758.88	758.88	1.24	0.178	3.252	0.963	low probability 155mm	3	1033.42		43.674119336	1928.30 43.674119336 -102.228090404
V12	723452.06	723452.06 4839413.05		2.14	0.227	6.707	0.910	8-in, Hmag 244	2	1033.16	1928.23	43.674118772	1928.23 43.674118772 -102.228093645
249	723193.56	723193.56 4839417.80 758.37	758.37	3.26	0.207	5.074	0.954	low probability deep 8-in	3	774.65	1932.98	43.674239169	1932.98 43.674239169 -102.231294707
250	723179.59	723179.59 4839455.56 758.89	758.89	3.17	0.193	4.141	0.877	very deep 8-in	3	760.69	1970.74	43.674582974	1970.74 43.674582974 -102.231452098
259	722879.72	722879.72 4839357.04 757.68	757.68	2.26	0.257	9.723	0.783	8-in with clutter about	3	460.82	1872.23	43.673786953	1872.23 43.673786953 -102.235208459
262	722822.41	722822.41 4839348.25 760.45	760.45	0.62	0.101	0.592	0.681	105mm with clutter to W	3	403.50	1863.44	43.673725135	863.44 43.673725135 -102.235922275
268	722354.46	722354.46 4839370.05 745.21	745.21	1.05	0.099	0.559	0.911	low probability 105mm	3	-64.44	1885.24	43.674061352	885.24 43.674061352 -102.241711460
269	723572.56	723572.56 4839291.28 743.26	743.26	2.94	0.254	9.368	0.934	unlikely 8-in	3	1153.66	1806.46	43.672987398	1806.46 43.672987398 -102.226651032
270	723179.58	723179.58 4839320.19 759.21	759.21	2.76	0.218	5.958	0.928	unlikely deep 8-in	3	760.67	1835.37	43.673365523	1835.37 43.673365523 -102.231508350
271	723030.26	723030.26 4839337.33 759.57	759.57	1.95	0.142	1.631	0.770	unlikely 155mm	3	611.36	1852.51	43.673564490	1852.51 43.673564490 -102.233351334
274	722735.03	722735.03 4839314.52 756.85	756.85	2.50	0.232	7.104	0.816	unlikely 8-in	3	316.13	1829.71	43.673447979	1829.71 43.673447979 -102.237018814
275	722697.93	722697.93 4839309.48 758.34	758.34	0.69	0.263	10.374	0.823	unlikely 8-in	3	279.02	1824.66	43.673413716	1824.66 43.673413716 -102.237480677
287	723482.82	723482.82 4839261.37 757.72	757.72	1.53	0.122	1.027	0.895	105mm	3	1063.92	1776.56	43.672745433	1776.56 43.672745433 -102.227775350
288	722797.61	722797.61 4839266.13 761.13	761.13	0.82	0.156	2.178	0.897	low probability 155mm	3	378.71	1781.32	43.672993992	1781.32 43.672993992 -102.236263448
292		722726.52 4839283.49 760.54	760.54	1.17	0.090	0.411	0.885	105mm	3	307.61	1798.68	43.673171460	1798.68 43.673171460 -102.237137164
297	722286.92	722286.92 4839235.23 753.10	753.10	0.62	0.178	3.250	0.871	low probability 8-in	3	-131.98		43.672869037	1750.42 43.672869037 -102.242603830
350	723416.52	723416.52 4839119.45 758.39	758.39	2.39	0.178	3.214	0.862	deep 8-in E/W	3	997.62	1634.63	43.671488969	1634.63 43.671488969 -102.228655586

Targ ID	(m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class.	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
353	723375.97	4839110.73	760.42	1.03	0.132	1.318	6.873	unlikely 155mm	3	957.07	1625.91	43.671422731	-102.229161643
385	722462.71	385 722462.71 4839111.02 752.90	752.90	0.34	0.105	0.662	0.791	possible 105mm	3	43.81	1626.21	43.671699349	1626.21 43.671699349 -102.240476969
396		722365.17 4839117.97 759.14	759.14	0.89	0.095	0.497	0.766	possible 105 near fenceline	3	-53.74		43.671790980	1633.15 43.671790980 -102.241682693
415		722192.08 4839133.34 758.30	758.30	2.05	0.223	6.323	928.0	possible 8-in with lots of clutter above	3	-226.83	1648.52	43.671980980	1648.52 43.671980980 -102.243820990
441	722707.89	722707.89 4839092.13	761.88	0.16	0.090	0.421	0.915	105mm	3	288.99	1607.31	43.671455983	-102.237446906
442	722694.79	722694.79 4839073.39 761.50	761.50	66.0	0.091	0.430	968.0	105mm	3	275.88	1588.58	43.671291390	1588.58 43.671291390 -102.237617012
443		722611.25 4839074.33 761.26	761.26	92'0	0.102	0.607	969'0	105mm or junk around campsite	3	192.35	1589.52	43.671324888	1589.52 43.671324888 -102.238651657
444		722590.40 4839062.49 761.69	761.69	0.44	0.109	0.745	0.793	105mm at the campsite	3	171.50	1577.68	43.671224652	1577.68 43.671224652 -102.238914857
445		722587.44 4839065.26 761.27	761.27	98.0	0.115	0.878	909.0	105mm or junk at the campsite	3	168.54	1580.44	43.671250389	1580.44 43.671250389 -102.238950428
455		722141.35 4839099.42 759.49	759.49	1.22	0.139	1.542	288'0	155mm @ 1 meter	3	-277.55	1614.60	1614.60 43.671691089	-102.244463464
457	722032.03	722032.03 4839087.03 756.38	756.38	3.49	0.470	59.367	096.0	you have to dig it up	3	-386.88		43.671612349	1602.22 43.671612349 -102.245823121
463	723372.68	723372.68 4838979.36 757.11	757.11	1.72	0.252	9.108	0.846	unlikely 8-in	3	953.77	1494.55	43.670242293	1494.55 43.670242293 -102.229256883
465	722602.75	722602.75 4839022.54 761.44	761.44	0.35	0.281	12.653	0.916	8-in @ 1 ft	3	183.85	1537.72	43.670861620	1537.72 43.670861620 -102.238778322
466	722401.22	466 722401.22 4839001.33 761.43	761.43	0.73	0.107	0.706	0.926	105mm	3	-17.69	1516.52	43.670731212	-17.69 1516.52 43.670731212 -102.241284139
474	723530.67	723530.67 4838949.50 755.78	755.78	1.85	0.219	6.017	0.680	improbable 8-in	3	1111.77	1464.68	43.669926206	1464.68 43.669926206 -102.227311739
478	722594.76	722594.76 4838976.41	760.40	1.78	0.114	0.839	0.840	unlikely 105mm	3	175.85	1491.59	43.670449120	1491.59 43.670449120 -102.238896433
484	722147.27	722147.27 4838976.13 762.50	762.50	0.43	0.160	2.321	0.949	low probabiliby 155mm	3	-271.64	1491.32	43.670580525	-271.64 1491.32 43.670580525 -102.244440961
485	722154.58	722154.58 4838964.91 762.39	762.39	0.60	0.096	0.507	0.879	105mm	3	-264.32	1480.10	43.670477457	1480.10 43.670477457 -102.244354910
486		722128.96 4838948.82	762.89	0.15	0.083	0.322	0.917	105mm	3	-289.94	1464.01	43.670340428	1464.01 43.670340428 -102.244678999
487	722134.87	722134.87 4838937.87 762.61	762.61	0.43	0.123	1.068	0.825	155mm in clutter	3	-284.03	1453.06	43.670240146	-284.03 1453.06 43.670240146 -102.244610285
495		723588.08 4838865.14 759.33	759.33	0.52	0.076	0.251	0.481	confused tracks, check for 105mm	က	1169.17	1380.33	43.669150279	1380.33 43.669150279 -102.226635450
497	723547.19	723547.19 4838859.92 756.19	756.19	2.20	0.214	5.581	0.861	unlikely 8-in	3	1128.28	1375.11	43.669115662	1128.28 1375.11 43.669115662 -102.227144226

Targ ID	(m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
500	723454.24	723454.24 4838870.33 756.26	756.26	2.66	0.263	10.422	0.876	maybe 2 targets, check for 8-in	3	1035.34	1385.51	43.669237199	1385.51 43.669237199 -102.228291481
501		723446.58 4838873.62 758.27	758.27	1.34	0.097	0.526	0.683	105mm	3	1027.68	1388.81	43.669269150	1388.81 43.669269150 -102.228384994
517	724099.53	724099.53 4838807.40 738.67	738.67	0.13	0.110	0.760	0.737	105mm	3	1680.63	1322.58	43.668476942	1322.58 43.668476942 -102.220322695
520	723587.88	723587.88 4838823.87 756.75	756.75	1.63	0.225	6.470	0.754	possible 8-in	3	1168.97	1339.06	43.668779216	1339.06 43.668779216 -102.226654999
522	723417.26	723417.26 4838790.67						possible 105mm	3	998.35	1305.85	43.668531891	1305.85 43.668531891 -102.228782649
524	723470.44	723470.44 4838788.32 753.90	753.90	00'0	0.174	3.029	0.691	155mm	3	1051.53	1303.51	1303.51 43.668494811	-102.228124744
527	723523.17	723523.17 4838750.60 760.00	760.00	1.46	0.139	1.527	0.929	155mm @ 5 ft	3	1104.27	1265.78	43.668139655	1265.78 43.668139655 -102.227487041
530	723421.93	530 723421.93 4838763.60 759.82	759.82	0.34	0.104	0.638	0.852	105mm	3	1003.03	1278.79	43.668287075	1278.79 43.668287075 -102.228735915
533		723799.13 4838770.53 756.48	756.48	1.59	0.185	3.594	0.956	unlikely 155mm	3	1380.23	1285.71	43.668235874	1285.71 43.668235874 -102.224059834
534		723816.15 4838783.72 756.24	756.24	1.32	0.202	4.694	0.896	unlikely 8-in	3	1397.25	1298.91	43.668349392	1298.91 43.668349392 -102.223843429
536	723945.01	723945.01 4838748.69 751.58	751.58	3.97	0.260	966.6	0.725	unlikely deep 8-in	3	1526.10	1263.87	43.667995504	1263.87 43.667995504 -102.222261556
542	724191.86	724191.86 4838707.42 734.34	734.34	2.18	0.166	2.633	0.912	unlikely 155mm	3	1772.96	1222.60	43.667549933	1222.60 43.667549933 -102.219220386
543		724017.15 4838703.34 748.57	748.57	3.83	0.269	11.124	0.880	dig as an 8-in	3	1598.25	1218.52	43.667565915	1218.52 43.667565915 -102.221386562
548	723532.51	723532.51 4838701.54 760.34	760.34	1.30	0.117	0.922	0.713	unlikely 105mm	3	1113.60	1216.72	43.667695649	1216.72 43.667695649 -102.227391699
220	723499.07	723499.07 4838700.80 758.98	758.98	0.42	0.128	1.202	0.860	unlikely 105mm	3	1080.16	1215.98	43.667699047	1215.98 43.667699047 -102.227806299
551	723475.63	723475.63 4838698.42 760.02	760.02	0.18	0.105	0.667	0.784	unlikely 105mm	3	1056.73	1213.61	43.667684720	1213.61 43.667684720 -102.228097656
228		723408.92 4838683.46 757.68	757.68	2.01	0.140	1.568	0.742	deep 155mm	3	990.02	1198.64	43.667570197	1198.64 43.667570197 -102.228930288
565		723902.70 4838629.67 760.64	760.64	0.18	0.208	5.130	0.803	unlikely 8-in on surface	3	1483.80	1144.86	43.666937920	1144.86 43.666937920 -102.222835077
573	723802.78	723802.78 4838555.87 760.36	760.36	0.90	0.122	1.044	0.920	improbable 155mm	3	1383.88	1071.06	43.666304303	1071.06 43.666304303 -102.224103627
583		723851.91 4838500.47 760.88	760.88	0.71	0.106	0.690	0.943	105mm	3	1433.00	1015.65	43.665791217	1015.65 43.665791217 -102.223517977
282		723874.38 4838410.85 761.41	761.41	1.23	0.114	0.851	0.898	105mm	3	1455.47	926.03	43.664978444	926.03 43.664978444 -102.223276783
V16		723579.50 4839330.88		0.72	0.116	0.895	0.752	105mm, not an Hmag pick	3	1160.60	1846.07	43.673341480	1846.07 43.673341480 -102.226548684
V20		723414.57 4838855.48		0.14	0.155	2.118	0.939	unlikely 155mm, not an Hmag pick	3	995.66	1370.67	1370.67 43.669115632	-102.228789135
V21	723414.65	V21 723414.65 4838854.28		0.25	0.080	0.297	0.960	small for 105mm, not an Hmag pick	3	995.75	1369.47	43.669104766	1369.47 43.669104766 -102.228788565

Targ ID	UTM X (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V22	723590.16	723590.16 4838750.24		0.85	0.308	0.308 16.723	0.533	look for an 8-in, funny fit, not an Hmag pick	3	1171.25	1265.43	43.668116347	1171.25 1265.43 43.668116347 -102.226657264
V26	723421.04	V26 723421.04 4838626.52		0.85	0.190	3.916	0.707	unlikely 8-in, no Hmag data	က	1002.13	1141.70	43.667054475	1002.13 1141.70 43.667054475 -102.228803803
28	722581.75	722581.75 4840014.19 738.01	738.01	0.00	0.207	2.068	0.973	15 m N of fenceline	4	162.85	2529.38	43.679786366	2529.38 43.679786366 -102.238629254
29	722489.90	722489.90 4840006.46 734.96	734.96	2.91	0.388	33.506	0.923	10 meters N of fenceline	4	71.00		43.679744391	2521.65 43.679744391 -102.239770681
135		721835.27 4839921.52 740.15	740.15	0.00	960'0	0.489	026'0	inverted, likely clutter	4	-583.64		43.679176197	2436.71 43.679176197 -102.247917807
198		723305.24 4839736.31	758.96	2.23	0.160	2.327	0.853	likely is geology	4	886.33	2251.50	43.677070186	2251.50 43.677070186 -102.229779057
199	723296.52	199 723296.52 4839719.42 758.75	758.75	1.76	0.191	3.993	0.658	low probability 8-in	4	877.61	2234.61	43.676920899	877.61 2234.61 43.676920899 -102.229894092
222	722911.04	722911.04 4839555.68 745.47	745.47	3.75	0.290	13.923	0.891	likely geology signal	4	492.14		43.675564039	2070.87 43.675564039 -102.234738281
225	723512.80	723512.80 4839490.30 756.02	756.02	98.0	0.210	5.324	888'0	unlikely 8-in	4	1093.89		43.674795329	2005.49 43.674795329 -102.227309109
243	723458.08	723458.08 4839411.34 757.81	757.81	2.26	0.246	8.521	0.803	likely not UXO	4	1039.18		43.674101617	1926.53 43.674101617 -102.228019789
245		723422.70 4839465.23 759.08	759.08	2.06	0.218	5.945	0.962	looks like clutter	4	1003.79		43.674596924	1980.42 43.674596924 -102.228435890
248		723262.62 4839436.71 759.25	759.25	2.27	0.189	3.862	0.856	inverted, car parts?	4	843.72	1951.90	43.674388579	1951.90 43.674388579 -102.230431156
251	722631.63	722631.63 4839450.20 745.86	745.86	62.0	0.133	1.341	0.931	looks like clutter	4	212.73	1965.38	43.674699144	212.73 1965.38 43.674699144 -102.238243988
253	723507.45	723507.45 4839372.56 755.74	755.74	1.24	0.148	1.859	0.784	looks like geology	4	1088.55		43.673737989	1887.74 43.673737989 -102.227424124
254	723504.93	723504.93 4839358.14 753.89	753.89	3.14	0.298	0.298 15.134	0.871	two targets cant separate, dig them	4	1086.03		43.673609093	1873.33 43.673609093 -102.227461268
266	722708.88	722708.88 4839390.13 747.09	747.09	1.80	0.190	3.933	0.918	likely not UXO	4	289.98		43.674135767	1905.32 43.674135767 -102.237311613
272		722828.34 4839311.53 760.02	760.02	1.82	0.166	2.605	0.940	likely not UXO	4	409.43		43.673393048	1826.71 43.673393048 -102.235863960
273		722801.50 4839304.26 761.22	761.22	0.57	960'0	0.494	0.948	unlikely 105mm	4	382.60	1819.45	43.673335781	1819.45 43.673335781 -102.236199461
276	722587.87	276 722587.87 4839287.40 750.17	750.17	0.02	0.222	6.221	296.0	inverted, 8-in?	4	168.96		43.673248115	1802.59 43.673248115 -102.238853458
278	722417.08	722417.08 4839286.13 758.03	758.03	1.78	0.404	37.685	0.937	too big for an 8-in	4	-1.83		43.673287807	1801.31 43.673287807 -102.240970169
279		722284.32 4839321.19 745.98	745.98	0.11	0.097	0.516	0.942	inverted, likely clutter	4	-134.59		43.673642857	1836.37 43.673642857 -102.242600700
282	723546.32	723546.32 4839280.34 747.79	747.79	0.17	660'0	0.553	0.281	likely not UXO	4	1127.42	1795.53	43.672896966	1795.53 43.672896966 -102.226980702
283	723554.91	283 723554.91 4839276.66 746.65	746.65	0.89	0.100	0.564		0.686 likely not UXO	4	1136.01		43.672861252	1791.85 43.672861252 -102.226875803

Targ ID	UTM X (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
291	722731.99	722731.99 4839264.52	758.21	1.37	0.167	2.674	0.939	looks like clutter	4	313.09	1779.70	1779.70 43.672999147	-102.237077169
293	722701.06	722701.06 4839252.24 758.22	758.22	0.00	0.091	0.432	0.812	likely not UXO	4	282.16		43.672897974	1767.42 43.672897974 -102.237465412
294	722536.90	722536.90 4839257.39 755.99	755.99	0.62	0.145	1.754	0.672	looks like clutter	4	118.00		43.672993472	1772.57 43.672993472 -102.239497356
296	722363.29	722363.29 4839266.52 750.52	750.52	26.0	0.303	15.901	0.939	too large for projo	4	-55.61		43.673127613	1781.71 43.673127613 -102.241644716
298	722141.16	722141.16 4839242.78 748.12	748.12	1.51	0.128	1.212	0.668	looks like clutter	4	-277.74	1757.97	43.672980514	1757.97 43.672980514 -102.244406783
337	722545.69	722545.69 4839197.56 758.94	758.94	0.49	0.190	3.910	0.946	likely not UXO	4	126.79	1712.74	43.672452736	1712.74 43.672452736 -102.239413126
346	723907.78	723907.78 4839111.94 733.11	733.11	00.0	0.317	18.267	0.982	large for 8-in, on surface	4	1488.87	1627.13	43.671273635	1627.13 43.671273635 -102.222572045
397	722386.89	722386.89 4839141.85 755.59	755.59	2.51	0.154	2.104	0.672	looks like geology	4	-32.01	1657.04	43.671999279	1657.04 43.671999279 -102.241403643
398	722369.91	722369.91 4839158.19	756.75	2.20	0.247	8.620	0.894	inverted, likely not UXO	4	-48.99	1673.37	43.672151275	673.37 43.672151275 -102.241607341
439	723483.52	723483.52 4839059.63 757.67	757.67	1.80	0.189	3.887	0.638	looks like clutter	4	1064.62	1574.81	43.670930838	1574.81 43.670930838 -102.227850247
446	722589.79	722589.79 4839072.70 759.66	759.66	2.56	0.213	5.501	0.908	large inverted target, fencepost?	4	170.89	1587.89	43.671316669	587.89 43.671316669 -102.238918198
449	722587.80	722587.80 4839105.32 762.10	762.10	0.35	0.082	0.311	0.904	junk	4	168.90	1620.50	1620.50 43.671610564	-102.238929414
464	722665.75	722665.75 4839016.12 760.67	760.67	1.52	0.380	31.249	0.961	too big for 8-in, dig it anyhow	4	246.84	1531.30	43.670784993	1531.30 43.670784993 -102.238000468
475	723527.45 4838951	.30	755.95	1.69	0.176	3.113	0.465	likely not UXO	4	1108.55	1466.49	1466.49 43.669943434	-102.227350859
464	723599.03	723599.03 4838866.64 758.00	758.00	1.39	0.182	3.441	0.797	likely not UXO	4	1180.13	1381.82	43.669160445	1381.82 43.669160445 -102.226499098
496		723566.79 4838851.99 756.04	756.04	4.79	0.360	26.589	0.824	too big for projo, dig it	4	1147.89		43.669038454	1367.18 43.669038454 -102.226904626
519	723737.04	723737.04 4838806.17 756.81	756.81	2.02	0.433	0.433 46.448	0.922	two targets, too big for 8-in projo	4	1318.14		43.668575136	1321.36 43.668575136 -102.224814293
521	723462.79	723462.79 4838824.90	753.30	4.74	0.362	27.149	0.720	too big for 8-in, dig it	4	1043.89	1340.09	43.668826105	1340.09 43.668826105 -102.228204291
531	723425.31	723425.31 4838757.87 759.48	759.48	0.73	0.081	0.309	0.784	likely clutter	4	1006.40	1273.06	43.668234550	1273.06 43.668234550 -102.228696490
547	723751.15	723751.15 4838722.73 758.94	758.94	0.77	0.204	4.822	0.965	inverted likely not UXO	4	1332.25	1237.91	43.667820424	1237.91 43.667820424 -102.224674053
554		723420.82 4838716.66 758.85	758.85	08'0	0.089	0.402	0.899	likely clutter	4	1001.92	1231.85	43.667865237	1231.85 43.667865237 -102.228769126
556		723444.84 4838687.97 754.51	754.51	3.36	0.519	0.519 79.970	0.941	too big for projo, touch it to be sure	4	1025.94		43.667599960	1203.15 43.667599960 -102.228483459

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мош.	Fit Quality	Analyst Comments Class.	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
557	723444.13	723444.13 4838671.85 755.35	755.35	2.99	0.485	65.373	0.942	partial signature, too big for projo, touch it to be sure	4	1025.23		43.667455266	1187.04 43.667455266 -102.228498926
260		723408.09 4838668.25	758.75	1.00	0.092	0.447	0.735	likely clutter	4	989.19	1183.44	1183.44 43.667433677	-102.228946871
561	723420.49	723420.49 4838653.53 756.97	756.97	0.10	0.207	5.105	0.963	partial signature, look at it	4	1001.59		43.667297609	1168.72 43.667297609 -102.228799350
999		724146.18 4838584.17	739.59	3.07	0.316	18.102	0.937	too big for projo	4	1727.28		43.666455336	1099.36 43.666455336 -102.219837496
267	724143.41	724143.41 4838575.74 742.17	742.17	3.24	0.147	1.816	0.903	looks like clutter	4	1724.50		43.666380328	1090.93 43.666380328 -102.219875376
268		724102.93 4838601.51 748.27	748.27	2.59	0.256	9.568	0.711	unlikely to be UXO	4	1684.03		43.666624260	1116.69 43.666624260 -102.220366083
586	-	723880.35 4838392.18	761.37	0.82	0.179	3.292	0.937	looks like clutter	4	1461.45	907.37	43.664808792	907.37 43.664808792 -102.223210541
V23	723701.26	723701.26 4838698.96		0.15	0.075	0.240	0.952	too small for a 105mm, no Hmag data	4	1282.36		43.667621696	1214.15 43.667621696 -102.225302001
								too small for					
V28		723741.16 4838532.55		0.17	0.072	0.210	0.986	105mm, no Hmag data	4	1322.26	1047.73	43.666113048	1047.73 43.666113048 -102.224876664
∞	722986.07	722986.07 4840030.10 739.26	739.26	-0.51	0.401	36.754	0.989	Stock tank?	9	567.17		43.679808215	2545.28 43.679808215 -102.233612417
21	722844.64	722844.64 4840028.05 739.23	739.23	0.00	0.381	0.381 31.520	0.994	stock tank?	2	425.74		43.679832185	2543.23 43.679832185 -102.235365840
28	722790.51	722790.51 4840016.36 740.21	740.21	-0.65	0.369	0.369 28.761	0.995	stock tank?	2	371.61	2531.54	43.679743296	2531.54 43.679743296 -102.236041466
22	722598.08	722598.08 4839986.16	738.16	0.40	0.089	0.407	0.931	likely clutter	2	179.18		43.679529413	2501.35 43.679529413 -102.238438491
75	723103.42	723103.42 4839969.76 741.88	741.88	-0.63	0.169	2.772	0.893	clutter in fenceline	2	684.51	2484.94	43.679230310	2484.94 43.679230310 -102.232183267
80	722992.62	722992.62 4840002.98 739.02	739.02	0:30	290.0	0.171	0.849	too small for 105mm	2	573.72	2518.17	43.679562373	573.72 2518.17 43.679562373 -102.233542468
81	722755.14	722755.14 4839958.37 740.24	740.24	0.24	0.054	060'0	0.933	too small for 105mm	9	336.23		43.679232435	2473.56 43.679232435 -102.236503798
82	722613.43	722613.43 4839972.28 739.10	739.10	0.00	0.082	0.310	0.947	inverted, likely clutter	9	194.53		43.679399946	2487.46 43.679399946 -102.238254010
83	722615.39	722615.394839953.75	738.58	0.28	0.072	0.213	0.939	too small for 105mm	2	196.49		43.679232711	2468.93 43.679232711 -102.238237416
105		722206.70 4839981.55						clutter in fenceline	9	-212.20		43.679605126	2496.74 43.679605126 -102.243290344
133		721929.80 4839962.21 739.04	739.04	0.23	0.374	29.855	0.992	clutter in fenceline	9	-489.11	2477.40	43.679513946	2477.40 43.679513946 -102.246729667
136		721773.83 4839929.02 739.79	739.79	0.29	0.064	0.150	0.905	too small for 105mm	2	-645.07		43.679261982	2444.21 43.679261982 -102.248676014
181		722666.93 4839938.39 739.79	739.79	0.04	0.085	0.347	0.956	inverted, likely clutter	5	248.03	2453.57	43.679079104	248.03 2453.57 43.679079104 -102.237605031

Targ ID	X MTU (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мош.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
182		722465.16 4839934.93 738.56	738.56	0.57	0.080	0.289	906'0	likely clutter, inverted	5	46.26		2450.12 43.679108495	-102.240106723
190	723059.20	723059.20 4839791.17 746.74	746.74	0.26	0.104	0.644	0.951	inverted likely clutter	2	640.29	2306.35	43.677637430	2306.35 43.677637430 -102.232805111
214		723005.09 4839686.29 745.26	745.26	1.59	0.200	4.599	662'0	inverted, looks like clutter	2	586.19	2201.48	43.676710482	2201.48 43.676710482 -102.233518949
223	722760.26	722760.26 4839562.45 759.49	759.49	0.02	0.130	1.261	0.601	looks like clutter	2	341.36		43.675670120	2077.63 43.675670120 -102.236603830
239	723578.90	239 723578.90 4839419.67 744.96	744.96	3.69	0.320	18.661	0.829	likely not UXO	2	1159.99	1934.86	43.674140185	1159.99 1934.86 43.674140185 -102.226519338
241	723507.24	723507.24 4839426.56 755.10	755.10	3.13	0.155	2.118	0.434	looks like fence wire	2	1088.33		1941.75 43.674223743	-102.227404385
247	723311.58	723311.58 4839428.50 758.97	758.97	2.31	0.214	5.578	0.917	looks like clutter	2	892.67	1943.69	1943.69 43.674300022	-102.229827939
252	723633.19	723633.19 4839374.45 739.92	739.92	2.12	0.183	3.520	976.0	looks like geology	2	1214.29		43.673717214	1889.64 43.673717214 -102.225865365
255	723498.46	723498.46 4839361.20 754.38	754.38	4.20	0.171	2.852	0.554	looks like geology	2	1079.56	1876.39	43.673638576	1079.56 1876.39 43.673638576 -102.227540238
263	722821.39	722821.39 4839355.82 758.80	758.80	1.26	0.131	1.292	0.694	looks like clutter	2	402.48		43.673793473	1871.01 43.673793473 -102.235931756
264	722798.02	722798.02 4839348.16 758.7	758.71	1.75	0.131	1.273	288'0	looks like clutter	2	379.12	1863.35	1863.35 43.673731595	-102.236224469
277	722442.02	722442.02 4839306.49 758.23	758.23	1.73	0.131	1.290	0.752	looks like clutter	2	23.12		43.673463453	1821.67 43.673463453 -102.240652703
280		722297.19 4839321.25 746.58	746.58	00.00	0.078	0.272	0.935	inverted, likely clutter	5	-121.71	1836.43	43.673639526	1836.43 43.673639526 -102.242441144
286	723512.01	286 723512.01 4839267.34 752.52	752.52	3.85	0.764	254.83	0.804	not UXO	2	1093.10		43.672790318	1782.52 43.672790318 -102.227411268
289	722802.17	289 722802.17 4839262.88 761.13	761.13	0.81	0.122	1.028	0.818	likely clutter	2	383.27	1778.07	43.672963376	383.27 1778.07 43.672963376 -102.236208275
290	722735.28	722735.28 4839272.28 758.76	758.76	1.62	0.203	4.755	869'0	looks like clutter	2	316.37	1787.47	43.673068006	1787.47 43.673068006 -102.237033238
328	723443.25	723443.25 4839181.78 754.22	754.22	4.41	0.468	58.680	906'0	too large for UXO	2	1024.35	1696.97	43.672041549	1696.97 43.672041549 -102.228298580
331	722682.40	722682.40 4839187.65 758.15	758.15	00.00	0.186	3.651	0.902	clutter	2	263.50	1702.84	43.672322737	1702.84 43.672322737 -102.237723309
332	722666.74	722666.74 4839185.36 757.36	757.36		0.159	2.285	0.926	clutter	2	247.84		43.672306834	1700.55 43.672306834 -102.237918283
333	722653.96	722653.96 4839178.99 758.38	758.38	0.24	0.156	2.187	0.903	clutter	2	235.05		43.672253380	1694.18 43.672253380 -102.238079325
334		722617.85 4839176.93 757.27	757.27	1.03	0.154	2.071	0.880	clutter	5	198.94	1692.12	1692.12 43.672245657	-102.238527618
335	722566.80	722566.80 4839172.23 760.96	760.96	1.10	0.117	0.920	0.798	clutter	2	147.90		43.672218660	1687.42 43.672218660 -102.239161971
336	722566.54	336 722566.54 4839184.05 760.34	760.34	0.71	0.117	0.905	0.946	clutter	2	147.63	1699.24	43.672325050	1699.24 43.672325050 -102.239160429
338	722546.58	722546.58 4839206.62 755.94	755.94	3.24	0.253	9.246	0.645	cluster of targets	2	127.67	1721.81	43.672533995	1721.81 43.672533995 -102.239398403
339	722509.60	722509.60 4839172.50 755.54	755.54	4.18	0.259	9.923	0.724	looks like clutter	5	90.69	1687.69	1687.69 43.672238195	-102.239870695
340	722501.01	722501.01 4839167.15 755.42	755.42	1.69	0.154	2.091	0.851	looks like clutter	5	82.11	1682.34	43.672192689	1682.34 43.672192689 -102.239979279
341	722403.69	341 722403.69 4839183.51 754.10	754.10	1.26	0.154	2.097	0.873	looks like clutter	2	-15.21	1698.69	43.672368887	1698.69 43.672368887 -102.241178384

UTM X (m)		UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
348	3.30 48	722348.30 4839197.27	759.08	2.60	0.223	6.313	0.730	looks like clutter	2	-70.60	1712.45	1712.45 43.672509221	-102.241858982
2254	1.18 48	722254.18 4839195.42 758.01	758.01	2.08	0.275	11.918	0.886	likely not UXO	2	-164.72		43.672520796	1710.61 43.672520796 -102.243025949
3756	3.84 48	723756.84 4839165.72 736.36	736.36	0.14	0.151	1.979	0.913	inverted signal in fenceline	5	1337.93	1680.91	43.671802743	1680.91 43.671802743 -102.224419891
3486	3.36 48	723486.36 4839116.22 757.05	757.05	1.27	0.181	3.402	0.411	looks like clutter	2	1067.45	1631.40	43.671438946	1631.40 43.671438946 -102.227791668
2725	9.14 48	360 722729.14 4839112.29 760.58	760.58	2.53	0.170	2.811	0.742	looks like geology	2	310.24	1627.47	43.671630909	310.24 1627.47 43.671630909 -102.237175323
22146	3.51 48.	722146.51 4839144.56 756.37	756.37	2.85	0.197	4.391	0.598	unusual signature, likely geology	2	-272.40	1659.74	43.672095516	-272.40 1659.74 43.672095516 -102.244381039
22075	5.61 48.	722075.61 4839117.81 757.07	757.07	2.43	0.256	9.558	0.835	likely clutter in fenceline	2	-343.29	1633.00	43.671876192	1633.00 43.671876192 -102.245270429
22069	3.34 48	722069.34 4839136.97 756.67	756.67	3.18	0.227	6.673	0.740	likely not UXO	2	-349.57	1652.16	43.672050345	1652.16 43.672050345 -102.245340293
22583	3.34 48	722583.34 4839084.13 761.82	761.82	0.40	0.070	0.195	0.570	junk	2	164.44	1599.32	43.671421387	164.44 1599.32 43.671421387 -102.238993447
22582	2.37 48	722582.37 4839102.87 761.88	761.88	0.59	0.071	0.206	0.855	junk	2	163.47	1618.06	43.671590201	1618.06 43.671590201 -102.238997706
22429	3.3648	722429.36 4839050.07 757.13	757.13	3.03	0.274	11.761	0.892	unusual signature likely not UXO	2	10.45	1565.25	43.671161104	1565.25 43.671161104 -102.240915355
722425.51		4839058.51	755.81	2.28	0.251	9.067	0.848	most likely is a roll of wire	2	6.61	1573.70	43.671238222	1573.70 43.671238222 -102.240959524
22357	7.14 48	722357.14 4839100.36 758.03	758.03	1.25	0.174	3.000	0.895	not UXO	2	-61.77	1615.54	43.671635011	-61.77 1615.54 43.671635011 -102.241789432
22132	2.67 48	722132.67 4839095.16 760.21	760.21	1.61	0.140	1.583	0.948	likely clutter	2	-286.23	1610.35	43.671655425	286.23 1610.35 43.671655425 -102.244572765
2346C	3.93	723460.93 4839006.61	753.77	3.08	0.416	41.175	0.843	too big for a projo	2	1042.03		43.670460866	1521.80 43.670460866 -102.228152104
23382	2.62 48	723382.62 4838983.35 753.73	753.73	3.13	0.404	37.583	0.918	not a projo	5	963.72	1498.53	43.670275143	963.72 1498.53 43.670275143 -102.229131996
23586	3.66 48	723586.66 4838928.99 756.55	756.55	2.24	0.225	6.537	0.883	likely not UXO	5	1167.76	1444.17	43.669724932	1167.76 1444.17 43.669724932 -102.226626483
23514	1.98 48.	723514.98 4838951.58 750.36	750.36	2.47	0.415	0.415 40.917	0.861	some kind of structure?	2	1096.07	1466.77	43.669949692	1096.07 1466.77 43.669949692 -102.227505275
2343C	7.21 48	723430.21 4838944.96 751.49	751.49	4.33	0.339 22.200	22.200	0.688	not UXO	2	1011.31	1460.15	1460.15 43.669915617	-102.228558230
22244	1.28 48	722244.28 4838958.05	762.62	0.14	0.072	0.217	0.783	likely junk	5	-174.62		43.670388937	1473.24 43.670388937 -102.243246389
22205	5.02 48	722205.02 4838956.75 762.92	762.92	0.00	0.075	0.238	0.901	likely junk	2	-213.88	1471.94	43.670388981	-213.88 1471.94 43.670388981 -102.243733374
23605	5.70 48.	723605.70 4838889.01 751.79	751.79	6.81	0.310	0.310 17.017	0.394	likely not UXO	5	1186.79	1404.20	43.669359685	1186.79 1404.20 43.669359685 -102.226407231
23454	1.72 48	723454.72 4838916.43 756.97	756.97	2.06	0.208	5.125	0.753	likely junk	5	1035.81	1431.61	43.669651641	1431.61 43.669651641 -102.228266479
23857	7.6048	723857.60 4838774.74 751.57	751.57	1.39	0.213	5.496	0.879	looks like geology	2	1438.69	1289.92	43.668256124	1438.69 1289.92 43.668256124 -102.223333727

Targ ID	(m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
537	724050.22	724050.22 4838769.65 741.90	741.90	0.80	0.119	0.954	0.921	likely clutter	5	1631.31	1284.84	43.668152349	1284.84 43.668152349 -102.220949399
546	723777.08	723777.08 4838708.01 755.06	755.06	6.53	0.311	17.136	0.328	five pieces of clutter	5	1358.18		43.667680257	1223.20 43.667680257 -102.224358942
552		723444.63 4838715.51	758.52	-2.22	0.138	1.502	0.625	looks like clutter	2	1025.73		43.667847695	1230.69 43.667847695 -102.228474655
562	723557.67	723557.67 4838682.65	761.41	0.15	0.087	0.372	0.778	clutter	2	1138.77	1197.84	43.667518215	1197.84 43.667518215 -102.227087714
563		723577.60 4838672.15 760.84	760.84	141	0.112	0.800	0.932	clutter	5	1158.70	1187.34	43.667417825	1187.34 43.667417825 -102.226845188
564		723895.79 4838626.90 759.84	759.84	1.03	0.121	1.018	0.270	clutter	5	1476.88		43.666915075	1142.09 43.666915075 -102.222921897
269	723970.54	723970.54 4838569.10 755.34	755.34	3.29	0.180	3.351	0.849	looks like geology	2	1551.64	1084.28	43.666372684	1084.28 43.666372684 -102.222019772
572	723755.82	723755.82 4838530.44 758.62	758.62	98.0	0.084	0.340	0.887	likely clutter	5	1336.92	1045.62	43.666089678	1045.62 43.666089678 -102.224695963
574		724004.20 4838497.31 754.89	754.89	2.96	0.271	11.376	0.566	fence?	5	1585.29		43.665716960	1012.50 43.665716960 -102.221632595
575		723994.71 4838490.93 755.68	755.68	1.02	0.201	4.668	0.802	fence?	5	1575.80		43.665662442	1006.12 43.665662442 -102.221752837
226	723983.10	723983.10 4838491.69 756.25	756.25	0.40	0.569	105.55	0.989	fence?	5	1564.19	1006.87	43.665672718	1006.87 43.665672718 -102.221896330
222	723982.34	723982.34 4838477.55 754.04	754.04	2.59	0.219	5.969	0.773	fence?	2	1563.43	992.74	43.665545851	992.74 43.665545851 -102.221911608
218		723972.56 4838468.89 755.40	755.40	2.30	0.191	3.962	0.428	fence?	2	1553.66	984.07	43.665470843	984.07 43.665470843 -102.222036298
579	723959.79	723959.79 4838474.75 757.53	757.53	68.0	0.248	8.753	0.550	fence?	2	1540.89	989.94	43.665527443	989.94 43.665527443 -102.222192102
580	723946.98	723946.98 4838420.10 756.92	756.92	4.41	0.268	11.047	0.633	fence?	5	1528.08	935.28	43.665039754	935.28 43.665039754 -102.222373443
581	723940.95	723940.95 4838407.63 758.18	758.18	3.19	908.0	16.399	0.828	fence?	5	1522.05	922.82	43.664929482	922.82 43.664929482 -102.222453358
582		723920.95 4838367.34						fence?	5	1502.05	882.53	43.664573188	882.53 43.664573188 -102.222717812
1	723058.35	723058.35 4840008.83 741.16	741.16	69.0-	0.154	2.090	0.799	nce post	9	639.45		43.679595263	2524.02 43.679595263 -102.232725574
2	723063.33	723063.33 4840004.64	741.16	99.0-	0.223	6.307	0.903	nce post	9	644.42	2519.82	43.679556044	2519.82 43.679556044 -102.232665644
3	723048.72	723048.72 4840017.96						nce post	9	629.82		43.679680260	2533.15 43.679680260 -102.232841094
4	723041.38	723041.38 4840027.40 734.37	734.37	5.82	0.803	295.92	0.367	fence corner	9	622.48		43.679767334	2542.59 43.679767334 -102.232928174
5	723024.88	723024.88 4840027.40 740.47	740.47	-0.48	0.379	31.246	0.809	nce post	9	605.98		43.679772258	2542.58 43.679772258 -102.233132651
9	723018.65	723018.65 4840028.70 740.86	740.86	-0.69	0.141	1.614	0.824	nce post	9	599.75	2543.88	2543.88 43.679785821	-102.233209263
7	723006.13	723006.13 4840027.40 739.82	739.82	-1.07	0.153	2.059	0.598	nce post	9	587.22		43.679777921	2542.59 43.679777921 -102.233365050
6	722969.85	722969.85 4840021.89 739.28	739.28	-0.39	0.123	1.062	0.828	fence post	9	550.94		43.679739290	2537.08 43.679739290 -102.233816908
10	722964.63	722964.63 4840021.49 739.61	739.61	-0.73	0.123	1.076	0.916	fence post	9	545.73		43.679737202	2536.67 43.679737202 -102.233881645
11	722952.58	722952.58 4840022.65 739.66	739.66	-0.86	0.154	2.103	0.967	fence post	9	533.68	2537.83	43.679751237	2537.83 43.679751237 -102.234030546
12	722946.63	722946.63 4840021.24 739.88	739.88	-1.12	0.133	1.342	0.878	fence post	9	527.73		43.679740424	2536.43 43.679740424 -102.234104852
13	722934.21	722934.21 4840023.52 738.44	738.44	0.72	0.473	0.473 60.557		0.637 clutter in fence line	9	515.31		43.679764634	2538.71 43.679764634 -102.234257774

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
14	722915.88	722915.88 4840020.64	740.27	89'0-	0.240	7.900	0.975	fence post	9	496.98	2535.83	2535.83 43.679744229	-102.234486104
15	722909.71	722909.71 4840020.12	740.76	-1.08	0.188	3.786	0.957	fence post	9	490.80	2535.30	43.679741364	2535.30 43.679741364 -102.234562845
16	722897.50	722897.50 4840019.43 740.74	740.74	-0.95	0.198	4.452	0.957	fence post	9	478.60		43.679738802	2534.61 43.679738802 -102.234714387
17	722891.08	722891.08 4840018.92 741.40	741.40	-1.63	0.130	1.258	0.901	fence post	9	472.17		43.679736151	2534.10 43.679736151 -102.234794229
18	722883.43	722883.43 4840022.88 740.40	740.40	-0.74	0.378	30.767	0.977	clutter in fence line	9	464.53		43.679774098	2538.07 43.679774098 -102.234887293
19	722862.30	722862.30 4840016.92 740.86	740.86	-0.45	0.177	3.169	0.982	fence post	9	443.39	l	43.679726828	2532.11 43.679726828 -102.235151686
20	722856.34	722856.34 4840016.95 741.16	741.16	-1.23	0.145	1.755	0.949	fence post	9	437.43	2532.13	43.679728849	2532.13 43.679728849 -102.235225543
22	722839.17	722839.17 4840015.71 739.60	739.60	00.0	0.313	17.487	0.737	fence post	9	420.27		43.679722896	2530.90 43.679722896 -102.235438769
23	722830.28	722830.28 4840014.74 740.26	740.26	-0.62	0.247	8.595	0.844	fence post	9	411.38	2529.93	43.679716815	2529.93 43.679716815 -102.235549280
24	722824.41	722824.41 4840014.67	741.23	-1.50	0.112	0.814	0.900	fence post	9	405.51	2529.85	43.679717916	2529.85 43.679717916 -102.235622066
25	722814.04	722814.04 4840016.78						fence post	9	395.14		43.679740004	2531.96 43.679740004 -102.235749743
26	722807.84	722807.84 4840012.94 741.39	741.39	-1.44	0.185	3.601	0.822	fence post	9	388.94		43.679707375	2528.13 43.679707375 -102.235828092
27	722795.73	722795.73 4840012.51	740.53	88'0-	0.250	8.908	0.926	fence post	9	376.83	2527.70	43.679707130	2527.70 43.679707130 -102.235978350
29	722780.34	722780.34 4840010.66 740.00	740.00	-0.43	0.196	4.324	0.930	fence post	9	361.44		43.679695080	2525.84 43.679695080 -102.236169854
30	722774.69	722774.69 4840010.32 740.53 -0.75	740.53	92'0-	0.152	2.003	0.916	fence post	9	355.78		43.679693752	2525.51 43.679693752 -102.236240068
31	722765.75	722765.75 4840010.92 740.44	740.44	98'0-	0.219	5.975	0.824	fence post	9	346.85		43.679701811	2526.10 43.679701811 -102.236350512
32	722760.50	722760.50 4840008.09						fence post	9	341.59	l	43.679677935	2523.27 43.679677935 -102.236416845
33	722747.66	722747.66 4840013.22						utter in fenceline	9	328.76	2528.40	43.679727890	328.76 2528.40 43.679727890 -102.236573782
34	722749.48	722749.48 4840009.94						fence post	9	330.58	2525.13	43.679697886	330.58 2525.13 43.679697886 -102.236552547
32	722741.99	722741.99 4840008.44 740.45	740.45	92'0-	0.186	3.696	0.928	fence post	9	323.08		43.679686656	2523.63 43.679686656 -102.236646069
36	722731.01	722731.01 4840007.92 740.90	740.90	-1.20	0.195	4.208	0.756	fence post	9	312.11	2523.10	43.679685227	2523.10 43.679685227 -102.236782285
37	722725.44	722725.44 4840008.03 740.47	740.47	-0.84	0.203	4.806	0.938	fence post	9	306.54		43.679687880	2523.21 43.679687880 -102.236851234
38	722714.11	722714.11 4840007.29 740.36	740.36	90.0	0.253	9.236	0.660	fence post	9	295.21	2522.47	43.679684631	2522.47 43.679684631 -102.236991985
39	722707.94	722707.94 4840006.78 740.68	740.68	-0.95	0.197	4.382	0.949	fence post	9	289.04	2521.96	43.679681889	2521.96 43.679681889 -102.237068627
40	722698.89	722698.89 4840006.99 740.85	740.85	-1.46	0.120	0.981	0.831	fence post	9	279.99		43.679686542	2522.18 43.679686542 -102.237180649
41	722693.83	722693.83 4840006.31 740.59	740.59	-1.23	0.141	1.617	0.957	fence post	9	274.92		43.679681926	2521.50 43.679681926 -102.237243706
42	722683.38	722683.38 4840005.26 740.30	740.30	-1.19	0.162	2.434	0.966	fence post	9	264.47	2520.44	43.679675596	2520.44 43.679675596 -102.237373641
43	722675.90	722675.90 4840004.89 740.13	740.13	-1.09	0.181	3.377	0.953	fence post	9	257.00	2520.07	43.679674494	2520.07 43.679674494 -102.237466468
44	722665.14	722665.14 4840004.27 739.93	739.93	-1.00	0.202	4.685	0.902	fence post	9	246.23	2519.45	43.679672160	246.23 2519.45 43.679672160 -102.237600098

Targ ID	X MTU (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
45	722659.12	722659.12 4840008.64	738.90	0.00	0.246	8.477	0.802	clutter in fenceline	9	240.22		43.679713253	2523.82 43.679713253 -102.237672827
46		722659.63 4840002.96						fence post	9	240.73	2518.15	43.679662063	2518.15 43.679662063 -102.237668814
47	722646.84	722646.84 4840002.79 739.27	739.27	-0.47	0.213	5.509	0.951	fence post	9	227.94	2517.98	43.679664338	2517.98 43.679664338 -102.237827442
48	722640.90	722640.90 4840001.89 739.65	739.65	92.0-	0.141	1.616	0.875	fence post	9	222.00		43.679658035	2517.08 43.679658035 -102.237901382
49	722628.58	722628.58 4840001.42 739.65	739.65	-0.68	0.278	12.239	0.947	fence post	9	209.67	2516.61	43.679657492	2516.61 43.679657492 -102.238054331
20	722623.00	722623.00 4840000.99 739.65	739.65	79.0-	0.215	5.675	0.962	fence post	9	204.09		43.679655304	2516.18 43.679655304 -102.238123628
51	722611.33	722611.33 4840000.29 739.74	739.74	-0.25	0.223	6.378	0.962	fence post	9	192.43		43.679652547	2515.48 43.679652547 -102.238268482
52	722606.55	722606.55 4839999.54 739.80	739.80	-0.33	0.147	1.824	0.817	fence post	9	187.65		43.679647169	2514.72 43.679647169 -102.238328016
23	722593.78	722593.78 4839999.12 739.38	739.38	-0.85	0.187	3.753	0.987	fence post	9	174.88		43.679647256	2514.31 43.679647256 -102.238486425
54	722588.11	722588.11 4839999.07 739.66	739.66	-1.41	0.141	1.618	0.916	fence post	9	169.20		43.679648457	2514.25 43.679648457 -102.238556799
22	722579.12	722579.12 4839998.61	739.91	-1.80	0.107	0.705	0.863	fence post	9	160.21	2513.79	43.679647005	2513.79 43.679647005 -102.238668387
26	722571.45	722571.45 4839997.64 738.71	738.71	-0.46	0.197	4.343	0.888	fence post	9	152.54		43.679640612	2512.83 43.679640612 -102.238763840
29	722567.36	722567.36 4839998.55						fence post	9	148.45		43.679650009	2513.73 43.679650009 -102.238814139
09	722560.75	722560.75 4839997.26 739.17	739.17	-1.47	0.138	1.505	0.963	fence post	9	141.85		43.679640385	2512.44 43.679640385 -102.238896516
61	722553.89	722553.89 4839996.83	738.87	-0.91	0.218	5.922	0.950	fence post	9	134.98		2512.02 43.679638601	-102.238981777
62	722541.00	722541.00 4839995.89 738.75	738.75	0.00	0.217	5.834	0.976	fence post	9	122.10		43.679634009	2511.08 43.679634009 -102.239141794
63	722534.83	722534.83 4839995.92 739.18	739.18	-0.75	0.187	3.716	0.844	fence post	9	115.93		43.679636158	2511.11 43.679636158 -102.239218279
64	722522.95	722522.95 4839994.87 738.96	738.96	-0.91	0.238	7.675	0.880	fence post	9	104.05		43.679630269	2510.06 43.679630269 -102.239365937
92	722515.94	722515.94 4839994.13						fence post	9	97.03		43.679625708	2509.32 43.679625708 -102.239453122
99	722507.81	722507.81 4839995.98						fence post	9	88.91		43.679644789	2511.17 43.679644789 -102.239553062
89	722501.13	722501.13 4839995.98						fence post	9	82.22		43.679646791	2511.17 43.679646791 -102.239635884
69	722493.23	722493.23 4839995.70						fence post	9	74.33		43.679646596	2510.89 43.679646596 -102.239733881
70	722476.61	722476.61 4839995.94	738.05	0.27	0.159	2.312	0.780	fence post	9	57.70		43.679653782	2511.13 43.679653782 -102.239939762
71	723115.77	723115.77 4839951.03 741.90	741.90	20.0	0.227	6.691	0.985	fence post	9	696.87	2466.22	43.679058183	2466.22 43.679058183 -102.232037901
72	723110.93	723110.93 4839955.24 742.50	742.50	0.51	0.145	1.757	0.929	fence post	9	692.03		43.679097499	2470.43 43.679097499 -102.232096181
73	723107.16	723107.16 4839960.72 742.29	742.29	-1.04	0.081	0.300	0.813	fence post	9	688.25		43.679147912	2475.91 43.679147912 -102.232140698
74	723102.96	723102.96 4839963.72	741.68	-0.41	0.213	5.498	0.982	fence post	9	684.05		2478.91 43.679176171	-102.232191503
92	723097.95	723097.95 4839969.27 739.88	739.88	1.26	0.235	7.405	0.523	fence post	9	679.04		43.679227594	2484.46 43.679227594 -102.232251242
27		723089.20 4839977.67 741.13	741.13	0.00	0.221	6.171	0.916	0.916 fence post	9	670.30	2492.86	43.679305777	2492.86 43.679305777 -102.232356141

UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class.	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
35.34	723085.34 4839981.82	741.39	-0.52	0.238	7.684	0.981	fence post	9	666.44		2497.00 43.679344194	-102.232402238
04.37	722604.37 4839953.59	738.79	0.00	090.0	0.121	0.874	too small for 105mm	9	185.47	2468.77	43.679234571	2468.77 43.679234571 -102.238374025
589.52	722589.52 4839968.90 738.08	738.08	0.04	0.065	0.160	0.859	0.859 too small for 105mm	9	170.62	2484.08	43.679376719	170.62 2484.08 43.679376719 -102.238551679
423.84	722423.84 4839981.84						nce post	9	4.94	2497.02	43.679542714	4.94 2497.02 43.679542714 -102.240599462
371.89	722371.89 4839981.84						fence post	9	-47.01	2497.02	43.679558264	-47.01 2497.02 43.679558264 -102.241243212
342.27	722342.27 4839981.55						fence post	9	-76.63	2496.74	43.679564568	-76.63 2496.74 43.679564568 -102.241610380
328.98	722328.98 4839980.56						fence post	9	-89.92	2495.74	43.679559581	-89.92 2495.74 43.679559581 -102.241775493
311.13	722311.13 4839978.28						fence post	9	-107.77	2493.46	43.679544429	-107.77 2493.46 43.679544429 -102.241997604
305.06	722305.06 4839978.28						fence post	9	-113.85	2493.46	-113.85 2493.46 43.679546247	-102.242072896
300.35	722300.35 4839979.84						fence post	9	-118.56	2495.03	43.679561743	-118.56 2495.03 43.679561743 -102.242130602
294.27	722294.27 4839980.70						fence post	9	-124.63	2495.89	43.679571246	-124.63 2495.89 43.679571246 -102.242205542
288.35	722288.35 4839978.14						fence post	9	-130.56	2493.32	43.679549966	-130.56 2493.32 43.679549966 -102.242280009
281.36	722281.364839978.99						fence post	9	-137.54	2494.18	43.679559739	-137.54 2494.18 43.679559739 -102.242366243
274.60	722274.60 4839978.14						fence post	9	-144.30	2493.32	43.679554079	-144.30 2493.32 43.679554079 -102.242450358
258.82	722258.82 4839976.77 739.18	739.18	-0.79	0.201	4.635	0.971	fence post	9	-160.09	2491.95	43.679546497	-160.09 2491.95 43.679546497 -102.242646486
252.39	722252.39 4839976.55 739.34	739.34	-0.90	0.159	2.300	0.966	fence post	9	-166.51	2491.74	43.679546490	2491.74 43.679546490 -102.242726209
240.28	722240.28 4839975.72 738.56	738.56	-0.68	0.260	10.098	0.981	fence post	9	-178.62	2490.90	43.679542589	-178.62 2490.90 43.679542589 -102.242876611
233.62	102 722233.62 4839975.36 739.29	739.29	-0.94	0.148	1.862	0.888	fence post	9	-185.28	2490.55	43.679541406	-185.28 2490.55 43.679541406 -102.242959324
2221.40	722221.40 4839974.50 739.35	739.35	0.01	0.190	3.924	0.968	fence post	9	-197.51	2489.68	43.679537275	-197.51 2489.68 43.679537275 -102.243111153
2214.54	722214.54 4839973.99 738.93	738.93	0.26	0.262	10.303	0.978	fence post	9	-204.37	2489.17	43.679534740	-204.37 2489.17 43.679534740 -102.243196346
2202.45	722202.45 4839976.00						fence post	9	-216.46	2491.19	43.679556448	-216.46 2491.19 43.679556448 -102.243345337
2196.07	722196.07 4839973.72						fence post	9	-222.84	2488.91	43.679537866	-222.84 2488.91 43.679537866 -102.243425333
2183.50	722183.50 4839972.40 739.35	739.35	-0.55	0.202	4.701	0.959	fence post	9	-235.40	2487.59	43.679529775	-235.40 2487.59 43.679529775 -102.243581564
2177.27	722177.27 4839972.11	739.51	-0.67	0.189	3.865	0.954	fence post	9	-241.63	2487.30	-241.63 2487.30 43.679529033	-102.243658947
2160.30	722160.30 4839967.88						fence post	9	-258.61	2483.07	43.679496053	-258.61 2483.07 43.679496053 -102.243871023
145.33	722145.33 4839966.17						fence post	9	-273.57	2481.36	43.679485157	-273.57 2481.36 43.679485157 -102.244057135
141.54	722141.54 4839968.17						fence post	9	-277.37	2483.35	43.679504222	-277.37 2483.35 43.679504222 -102.244103372
127.56	722127.564839968.03						fence post	9	-291.34	2483.21	43.679507120	-291.34 2483.21 43.679507120 -102.244276603
2119.41	722119.41 4839967.18 740.23	740.23	-1.19	0.226	6.567	0.787	fence post	9	-299.49	2482.37	43.679501946	-299.49 2482.37 43.679501946 -102.244377919

Targ ID	X MTU (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
115	722105.67	722105.67 4839966.02 740.53	740.53	-0.88	0.253	9.253	0.841	fence post	9	-313.24		43.679495588	2481.20 43.679495588 -102.244548735
116	722099.06	116 722099.06 4839966.16 740.36 -0.49	740.36	-0.49	0.216	5.752	0.964	fence post	9	-319.84	2481.34	43.679498829	-319.84 2481.34 43.679498829 -102.244630503
117	722085.40	722085.40 4839965.68 739.95	739.95	-0.31	0.205	4.926	0.991	fence post	9	-333.50		43.679498665	2480.87 43.679498665 -102.244800039
118	722079.90	722079.90 4839965.42	740.52	-1.12	0.153	2.039	0.919	fence post	9	-339.00	2480.61	43.679497929	2480.61 43.679497929 -102.244868249
119		722067.72 4839964.21 740.39	740.39	-1.06	0.175	3.040	0.959	fence post	9	-351.18		43.679490709	2479.40 43.679490709 -102.245019733
120	722061.45	722061.45 4839963.82 740.26	740.26	88.0-	0.226	6.615	0.978	fence post	9	-357.46	2479.00	43.679489048	2479.00 43.679489048 -102.245097625
121	722048.09	722048.09 4839963.06 740.26	740.26	-0.64	0.209	5.234	0.902	fence post	9	-370.82		43.679486236	2478.25 43.679486236 -102.245263468
122	722043.16	722043.16 4839962.70 740.77	740.77	-1.08	0.164	2.517	0.984	fence post	9	-375.74		43.679484499	2477.89 43.679484499 -102.245324663
123	722036.08	722036.08 4839962.38 740.66	740.66	-1.05	0.187	3.752	0.907	fence post	9	-382.83	2477.57	43.679483731	-382.83 2477.57 43.679483731 -102.245412590
124	722030.74	722030.74 4839961.75 740.77		-1.20	0.152	2.004	0.969	fence post	9	-388.17		43.679479619	2476.94 43.679479619 -102.245479030
125	722024.37	722024.37 4839961.54 740.41	740.41	-0.91	0.223	6.328	0.958	fence post	9	-394.53		43.679479674	2476.73 43.679479674 -102.245557979
126		722019.20 4839960.92 740.63	740.63	-1.47	0.125	1.129	0.833	fence post	9	-399.71	2476.11	43.679475616	2476.11 43.679475616 -102.245622353
127		722006.33 4839960.59 740.13	740.13	-0.73	0.162	2.450	0.948	fence post	9	-412.57		43.679476439	2475.77 43.679476439 -102.245781917
128		722000.32 4839960.31	739.73	-0.72	0.242	8.133	0.944	fence post	9	-418.59		43.679475725	2475.49 43.679475725 -102.245856608
129	721987.56	721987.56 4839959.28	739.92	-0.79	0.158	2.237	0.964	fence post	9	-431.34	2474.47	43.679470330	2474.47 43.679470330 -102.246015029
130	721981.51	721981.51 4839960.34						fence post	9	-437.39		43.679481610	2475.52 43.679481610 -102.246089615
131	721970.35	721970.35 4839958.06						fence post	9	-448.56	2473.24	43.679464456	-448.56 2473.24 43.679464456 -102.246228903
132	721962.45	721962.45 4839960.05						fence post	9	-456.46	2475.24	43.679484745	2475.24 43.679484745 -102.246325962
134	721889.00	721889.00 4839948.09						fence post	9	-529.90		43.679399100	2463.27 43.679399100 -102.247240985
137	721747.13	721747.13 4839940.64						fence post	9	-671.77	2455.82	43.679374432	2455.82 43.679374432 -102.249002133
138	721738.47	721738.47 4839942.20						fence post	9	-680.43		43.679391104	2457.39 43.679391104 -102.249108781
139		721732.62 4839941.78						fence post	9	-686.28		43.679389006	2456.96 43.679389006 -102.249181426
140	721719.11	721719.11 4839938.78						fence post	9	-699.80	2453.97	43.679366146	2453.97 43.679366146 -102.249350182
141	721714.40	721714.40 4839940.21						fence post	9	-704.51	2455.40	43.679380358	2455.40 43.679380358 -102.249407948
142	721701.71	721701.71 4839939.50						fence post	9	-717.19		43.679377738	2454.68 43.679377738 -102.249565414
143	721696.70	721696.70 4839939.78						fence post	9	-722.20		43.679381796	2454.97 43.679381796 -102.249627414
144	721684.25	721684.25 4839937.93						fence post	9	-734.66		43.679368863	2453.12 43.679368863 -102.249782525
145	721678.02	721678.02 4839937.50						fence post	9	-740.89		43.679366879	2452.69 43.679366879 -102.249859876
146	721665.64	146 721665.64 4839936.93						fence post	9	-753.27		43.679365450	2452.12 43.679365450 -102.250013519

Targ ID	(m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments Class	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
147	721659.26	721659.26 4839936.65						fence post	9	-759.65		2451.83 43.679364790	-102.250092693
148	721647.26	721647.26 4839935.08						fence post	9	-771.65		43.679354283	2450.27 43.679354283 -102.250242040
149	721641.16	721641.16 4839936.41 740.67	740.67	-0.56	0.247	8.665	0.980	fence post	9	-777.74	2451.59	43.679368031	-777.74 2451.59 43.679368031 -102.250317053
150	721632.29	721632.29 4839935.67 741.76 -1.48	741.76	-1.48	0.108	0.722	0.938	fence post	9	-786.61		43.679364056	2450.86 43.679364056 -102.250427285
151	721626.54	721626.54 4839935.03 741.34	741.34	76.0-	0.173	2.949	0.980	fence post	9	-792.37	2450.21	43.679359955	2450.21 43.679359955 -102.250498813
152	721620.54	721620.54 4839934.97 741.43	741.43	-1.02	0.143	1.672	0.976	fence post	9	-798.36	2450.15	43.679361201	-798.36 2450.15 43.679361201 -102.250573183
153	721614.78	721614.78 4839934.63 741.31	741.31	-0.88	0.176	3.110	0.974	fence post	9	-804.12	2449.82	43.679359908	-804.12 2449.82 43.679359908 -102.250644691
154		721608.57 4839934.30 741.71	741.71	-1.31	0.129	1.241	0.944	fence post	9	-810.34		43.679358765	2449.48 43.679358765 -102.250721820
155	721602.38	721602.38 4839933.76 741.65	741.65	-1.28	0.141	1.603	0.937	fence post	9	-816.52		43.679355812	2448.95 43.679355812 -102.250798719
156	721591.18	721591.18 4839933.02 741.48	741.48	-1.11	0.148	1.855	0.944	fence post	9	-827.73	2448.21	43.679352458	-827.73 2448.21 43.679352458 -102.250937843
157	721584.98	721584.98 4839932.51 741.27	741.27	-0.92	0.173	2.935	0.987	fence post	9	-833.93	2447.70	43.679349769	-833.93 2447.70 43.679349769 -102.251014860
158	721572.04	721572.04 4839931.89 741.09	741.09	0.16	0.084	0.341	0.693	fence post	9	-846.87	2447.07	43.679347977	846.87 2447.07 43.679347977 -102.251175478
160	721554.31	721554.31 4839930.53 741.12	741.12	82.0-	0.140	1.583	0.940	fence post	9	-864.59	2445.72	43.679341055	2445.72 43.679341055 -102.251395726
161	721566.64	721566.64 4839931.41 741.36 -0.62	741.36	-0.62	0.132	1.323	0.946	fence post	9	-852.26	2446.59	43.679345271	-852.26 2446.59 43.679345271 -102.251242518
162	721548.79	721548.79 4839930.39 741.02	741.02	02'0-	0.171	2.837	0.936	fence post	9	-870.12	2445.58	43.679341464	-870.12 2445.58 43.679341464 -102.251464207
163	721537.13	721537.13 4839930.81						fence post	9	-881.77		43.679348707	2446.00 43.679348707 -102.251608476
164	721530.90	721530.90 4839930.10						fence post	9	-888.00		43.679344159	2445.28 43.679344159 -102.251685944
165	721517.84	721517.84 4839927.55 740.78	740.78	-0.32	0.227	6.693	0.981	fence post	9	-901.06	2442.73	43.679325114	-901.06 2442.73 43.679325114 -102.251848847
166	721511.41	721511.41 4839928.69 740.94 -0.44	740.94	-0.44	0.145	1.752	0.905	fence post	9	-907.50	2443.88	43.679337349	-907.50 2443.88 43.679337349 -102.251928109
167	721499.54	721499.54 4839926.58 741.17	741.17	-0.55	0.136	1.436	0.919	fence post	9	-919.37	2441.77	43.679321887	2441.77 43.679321887 -102.252076096
168	721493.66	721493.66 4839926.29 741.42	741.42	-0.61	0.188	3.772	926.0	fence post	9	-925.25		43.679320986	2441.47 43.679320986 -102.252149061
169	721476.26	721476.26 4839925.20 740.92	740.92	1.00	0.310	17.026	0.942	fence post	9	-942.64	2440.39	43.679316402	-942.64 2440.39 43.679316402 -102.252365060
170		721446.72 4839923.39 743.10	743.10	89.0-	0.143	1.689	0.953	fence post	9	-972.18		43.679308941	2438.58 43.679308941 -102.252731889
171	721313.69	721313.69 4839916.85						fence post	9	-1105.22		43.679289784	2432.04 43.679289784 -102.254383101
172	721307.39	721307.39 4839914.02 743.65	743.65	-1.09	0.186	3.652	0.992	fence post	9	-1111.51		43.679266197	2429.21 43.679266197 -102.254462258
173	721289.39	721289.39 4839913.54 743.26	743.26	09'0-	0.471	59.857	0.954	fence post	9	-1129.52	2428.73	43.679267217	-1129.52 2428.73 43.679267217 -102.254685609
174	723153.64	723153.64 4839913.67						fence post	9	734.73	2428.86	43.678710842	2428.86 43.678710842 -102.231584171
175	723150.30 4839917	4839917.23						fence post	9	731.39		43.678743863	2432.42 43.678743863 -102.231624107
176	723141.18	723141.18 4839925.39 742.94	742.94	-0.72	0.201	4.660	0.961	fence post	9	722.28	2440.57	43.678819916	722.28 2440.57 43.678819916 -102.231733632

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
177	723139.13	723139.13 4839929.20						fence post	9	720.23	2444.38	43.678854798	2444.38 43.678854798 -102.231757504
178	723136.70	723136.70 4839935.32						fence post	9	717.80	2450.51	43.678910598	717.80 2450.51 43.678910598 -102.231785087
179	723128.65	723128.65 4839938.03						fence post	9	709.75		43.678937350	2453.21 43.678937350 -102.231883728
180	723125.92	723125.92 4839942.72						fence post	9	707.01	2457.91	43.678980436	2457.91 43.678980436 -102.231915664
183		723230.04 4839837.20						fence post	9	811.14		43.678000147	2352.39 43.678000147 -102.230669046
184		723198.81 4839871.63 744.89	744.89	-0.19	0.340	22.566	0.978	fence post	9	779.90		43.678319128	2386.81 43.678319128 -102.231041874
185	723192.28	723192.28 4839874.01	745.40	-0.94	0.194	4.189	0.799	fence post	9	773.38		43.678342540	2389.20 43.678342540 -102.231121700
188	723295.66	723295.66 4839773.22						fence post	9	876.76	2288.40	43.677404961	2288.40 43.677404961 -102.229882412
192	723359.79	723359.79 4839704.89 760.33	760.33	1.11	0.366	0.366 28.113	0.841	fence post	9	940.89	2220.08	43.676771232	940.89 2220.08 43.676771232 -102.229116064
193	723346.70	723346.70 4839716.52 761.94	761.94	-0.80	0.174	3.024	0.968	fence post	9	927.79	2231.71	43.676879753	2231.71 43.676879753 -102.229273520
194	723342.54	723342.54 4839720.73 761.98	761.98	-0.82	0.214	5.567	0.981	fence post	9	923.64		43.676918866	2235.92 43.676918866 -102.229323291
195	723334.44	723334.44 4839729.05 762.02	762.02	-0.75	0.197	4.383	0.961	fence post	9	915.54	l	43.676996087	2244.23 43.676996087 -102.229420142
196		723329.75 4839733.81 762.30	762.30	-0.93	0.215	5.643	0.935	fence post	9	910.85	l	43.677040282	2248.99 43.677040282 -102.229476297
197	723313.53	723313.53 4839755.90 761.09	761.09	2.07	0.488	0.488 66.580	0.754	fence post with clutter	9	894.62		43.677243885	2271.09 43.677243885 -102.229668225
204	723421.10	723421.10 4839646.66 760.86	760.86	0.42	0.613	131.77	0.992	fence post	9	1002.19		43.676229074	2161.85 43.676229074 -102.228380532
205	723412.17	723412.17 4839649.80						fence post	9	993.27	2164.98	43.676259986	2164.98 43.676259986 -102.228489873
206		723405.34 4839657.02 761.98	761.98	-1.14	0.170	2.807	0.951	fence post	9	986.43		43.676326954	2172.20 43.676326954 -102.228571539
207	723401.59	723401.59 4839661.10 762.02	762.02	-1.15	0.182	3.425	0.907	fence post	9	982.69	2176.28	43.676364789	982.69 2176.28 43.676364789 -102.228616288
208	723393.26	723393.26 4839669.24 762.06	762.06	-1.14	0.133	1.347	0.949	fence post	9	974.36	2184.43	43.676440548	2184.43 43.676440548 -102.228716120
209	723390.05	723390.05 4839672.32	762.08	-1.15	0.144	1.709	0.931	fence post	9	971.15	2187.51	43.676469226	2187.51 43.676469226 -102.228754578
210		723382.93 4839679.13						fence post	9	964.02		43.676532604	2194.32 43.676532604 -102.228840044
211		723379.44 4839683.97						fence post	9	960.53		43.676577199	2199.16 43.676577199 -102.228881329
212	723370.59	723370.59 4839697.51	761.49	96.0	0.358	26.211	0.960	fence post	9	951.69	2212.70	43.676701604	2212.70 43.676701604 -102.228985316
234	723640.17	723640.17 4839415.35						fence post	9	1221.27	1930.54	43.674082919	1930.54 43.674082919 -102.225761929
235	723628.78	723628.78 4839426.89						fence post	9	1209.87	1942.07	43.674190085	1942.07 43.674190085 -102.225898305
236	723624.45	723624.45 4839430.30						fence post	9	1205.54		43.674222125	1945.49 43.674222125 -102.225950528
237	723617.00	723617.00 4839437.99						fence post	9	1198.10		43.674293524	1953.18 43.674293524 -102.226039565
299	723869.92	723869.92 4839176.63						fence	9	1451.01	1691.82	43.671866844	1691.82 43.671866844 -102.223014309

Depth (m)	Mom.	Analyst Comments Class.			Local Y Latitude Longitude (m)
-0.58 0.215 5.715	0.971	fence	9	1439.39	1692.39 43.671875465 -102.223158053
733.71 -0.77 0.163 2.476 0	0.905	fence	9	1433.55	1692.25 43.671876007 -102.223230440
723846.14 4839176.56 733.72 -0.74 0.245 8.369 (0.970	fence	9	1427.24	1427.24 1691.75 43.671873338 -102.223308874
303 723840.48 4839176.80 733.65 -0.49 0.236 7.562	0.965	fence	9	1421.57	1421.57 1691.98 43.671877196 -102.223379017
		fence	9	1418.13	1418.13 1691.53 43.671874189 -102.223421890
723828.56 4839176.44 734.33 -0.93 0.172 2.900	0.858	fence	9	1409.66	1409.66 1691.62 43.671877552 -102.223526774
723821.91 4839175.51 734.21 -0.52 0.227 6.649	0.959	fence	9	1403.01	1403.01 1690.70 43.671871239 -102.223609527
723809.77 4839175.31 734.54 -0.51 0.233 7.274	0.987	fence	9	1390.86	390.86 1690.49 43.671873038 -102.223760122
-0.65 0.172 2.927	0.985	fence	9	1379.57	1690.14 43.671873285 -102.223900219
723792.67 4839175.14 735.21 -0.60 0.162 2.423	0.933	fence	9	1373.76	1373.76 1690.33 43.671876711 -102.223972069
723787.00 4839174.60 735.37 -0.49 0.230 6.988	0.960	fence	9	1368.10	1368.10 1689.79 43.671873550 -102.224042456
723780.99 4839174.23 735.45 -0.28 0.351 24.665 (0.981	fence	9	1362.09	1362.09 1689.42 43.671872008 -102.224117052
723774.22 4839174.43 736.26 -0.84 0.220 6.083 (0.934	fence	9	1355.32	1355.32 1689.61 43.671875823 -102.224200853
723768.41 4839173.94 736.11 -0.30 0.311 17.269 0	0.974	fence	9	1349.51	1349.51 1689.13 43.671873184 -102.224273080
723724.43 4839172.19 737.88 -0.52 0.254 9.384 0.	0.990	fence	9	1305.53	1305.53 1687.38 43.671870702 -102.224818698
723713.58 4839172.31 738.40 -0.44 0.185 3.648 0.	0.920	fence	9	1294.67	1687.49 43.671875024 - 102.224953141
	0.931	fence	9	1289.05	1289.05 1687.16 43.671873720 -102.225022939
723702.59 4839171.69 739.21 -0.90 0.169 2.773	0.833	fence	9	1283.69	1283.69 1686.88 43.671872785 -102.225089561
723680.90 4839171.00 740.06 -0.75 0.173 2.954	0.965	fence	9	1261.99	1261.99 1686.18 43.671873057 - 102.225358596
723645.27 4839169.65 742.29 -1.23 0.082 0.321	0.825	fence	9	1226.37	226.37 1684.84 43.671871724 -102.225800595
723592.69 4839168.17 743.80 0.00 0.123 1.076	0.956	fence	9	1173.79	1173.79 1683.35 43.671874160 -102.226452633
723568.65 4839168.02 744.67 1.15 0.204 4.842	0.759	fence	9	1149.75	1149.75 1683.20 43.671880042 -102.226750615
723560.45 4839166.75 746.46 0.00 0.174 3.017	0.826	fence	9	1141.54	1141.54 1681.94 43.671871159 -102.226852772
750.33 -0.91 0.157 2.232 0	0.769	fence	9	1121.03	1121.03 1681.34 43.671871904 -102.227107227
		fence	9	1113.66	1113.66 1680.76 43.671868919 -102.227198680
		fence	9	1108.04	1108.04 1679.90 43.671862925 -102.227268670
		fence	9	1094.07	1094.07 1681.76 43.671883778 -102.227441052
		fence	9	1057.46	1057.46 1677.34 43.671855085 -102.227896454
329 722734.46 4839203.03 757.64 2.59 0.248 8.747 0.745 looks like clutter					

Targ ID	(m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
345		722016.22 4839180.97 757.69	757.69	0.82	0.128	1.189	0.665	clutter	9	-402.69	1696.16	43.672461935	1696.16 43.672461935 -102.245980382
348	723724.49	723724.49 4839125.39 737.72	737.72	00.00	0.077	0.262	0.767	clutter	9	1305.59	1640.57	43.671449771	1640.57 43.671449771 -102.224837395
351	723405.29	723405.29 4839161.59	757.32	2.55	0.357	25.979	0.765	fence	9	986.39	1676.78	43.671871388	1676.78 43.671871388 -102.228777328
354	723356.73	723356.73 4839158.50						fence	9	937.82	1673.69	43.671858179	1673.69 43.671858179 -102.229380317
322		722813.23 4839141.41						fence	9	394.33	1656.60	43.671867636	1656.60 43.671867636 -102.236121379
326		722803.81 4839137.14						fence	9	384.91	1652.33	43.671832037	1652.33 43.671832037 -102.236239832
357	722800.85	722800.85 4839140.01	762.99	-1.05	0.177	3.151	0.927	fence	9	381.95	1655.19	43.671858707	1655.19 43.671858707 -102.236275372
358	722795.17	722795.17 4839139.62	762.56	-0.68	0.226	6.601	0.976	fence	9	376.27	1654.81	43.671856932	1654.81 43.671856932 -102.236345915
328		722745.53 4839138.09 762.07	762.07	0.14	0.185	3.642	0.853	fence	9	326.63	1653.28	43.671858084	1653.28 43.671858084 -102.236961607
361		722710.50 4839136.89 761.43	761.43	-0.67	0.117	0.909	0.943	fence	9	291.60	1652.08	43.671857784	1652.08 43.671857784 -102.237396096
362	722683.24	722683.24 4839135.46 758.16	758.16	00.00	0.273	11.623	0.876	fence	9	264.34	1650.65	43.671853094	1650.65 43.671853094 -102.237734454
363	722674.90	722674.90 4839135.29 759.16	759.16	98.0	0.228	6.762	0.911	fence	9	256.00	1650.47	43.671854017	1650.47 43.671854017 -102.237837838
364	722665.52	722665.52 4839134.79 759.82	759.82	0.93	0.224	6.437	0.957	fence	9	246.61	1649.97	43.671852322	1649.97 43.671852322 -102.237954326
365		722654.28 4839134.60 762.27	762.27	-0.70	0.171	2.858	0.981	fence	9	235.37	1649.78	43.671853979	1649.78 43.671853979 -102.238093670
366	722646.16	722646.16 4839134.45 762.26	762.26	-0.33	0.242	8.106	0.980	fence	9	227.26	1649.64	43.671855118	1649.64 43.671855118 -102.238194325
367	722637.56	722637.56 4839134.10 761.99	761.99	-0.09	0.131	1.298	0.850	fence	9	218.65	1649.29	43.671854568	1649.29 43.671854568 -102.238301063
368	722625.55	722625.55 4839133.72 761.83	761.83	0.40	0.127	1.157	0.896	fence	9	206.65		43.671854753	1648.91 43.671854753 -102.238449999
369		722615.43 4839133.10 762.49	762.49	-0.30	0.212	5.447	0.969	fence	9	196.53		43.671852140	1648.28 43.671852140 -102.238575587
370	722607.46	722607.46 4839133.04 762.13	762.13	00'0	0.443	49.568	0.926	gate	9	188.56	1648.22	43.671853997	1648.22 43.671853997 -102.238674352
371	722595.21	722595.21 4839132.78 763.20	763.20	-0.52	0.192	4.057	0.925	fence	9	176.30	1647.96	43.671855312	1647.96 43.671855312 -102.238826348
372	722601.41	722601.41 4839133.44						fence	9	182.51	1648.62	43.671859391	1648.62 43.671859391 -102.238749209
373		722589.02 4839132.28 763.51	763.51	-0.39	0.173	2.979	0.824	fence	9	170.11	1647.47	43.671852689	1647.47 43.671852689 -102.238903239
374	722583.08	722583.08 4839131.85	763.27	-0.55	0.252	9.183	0.917	fence	9	164.18	1647.04	43.671850624	1647.04 43.671850624 -102.238976962
375		722577.19 4839131.86 763.33	763.33	-0.70	0.337	21.948	0.966	fence	9	158.28	1647.05	43.671852504	1647.05 43.671852504 -102.239049974
376	722571.06	722571.06 4839131.77 763.37	763.37	-0.72	0.324	19.450	0.961	fence	9	152.16		43.671853480	1646.96 43.671853480 -102.239125918
377		722563.68 4839131.07 763.56	763.56	-1.13	0.201	4.639	0.484	fence	9	144.77	1646.26	43.671849413	1646.26 43.671849413 -102.239217717
378	722558.90	722558.90 4839144.38	761.33	0.75	0.105	0.671	0.896	clutter	9	140.00	1659.57	43.671970578	1659.57 43.671970578 -102.239271362
379		722552.50 4839131.73						fence	9	133.59	1646.91	43.671858671	1646.91 43.671858671 -102.239355939
380	722536.25	722536.25 4839132.58						fence	9	117.34	1647.77	43.671871223	1647.77 43.671871223 -102.239556968

UTM X UTM Y HAE Depth (m) (m) (m)	· 0		/	st Comments			Local Y (m)	Latitude	Longitude
-0.31	1 0.301	15.642	0.689	fence	9	106.43	1645.24	1645.24 43.671851738	-102.239693212
0.46	3 0.430	45.299	0.459	fence	9	87.54	1645.23	43.671857335	1645.23 43.671857335 -102.239927266
1.41	0.481	63.648	0.674	fence	9	62.14	1643.55	43.671849779	62.14 1643.55 43.671849779 -102.240242710
0.00	0.259	896'6	0.935	fence	9	48.62	1643.10	43.671849772	48.62 1643.10 43.671849772 -102.240410386
Ζí	-0.29 0.369	0.369 28.714	0.979	fence	9	35.56		43.671851566	1642.86 43.671851566 -102.240572330
0.00	0.251	9.075	0.977	fence	9	29.28	1642.75	43.671852430	29.28 1642.75 43.671852430 -102.240650171
٧.	-1.24 0.076	0.250	0.705	fence	9	22.50	1643.08	43.671857451	22.50 1643.08 43.671857451 -102.240733989
()	1.29 0.154	2.070	0.546	fence	9	17.26	1644.29	43.671869922	1644.29 43.671869922 -102.240798407
	-0.83 0.358	26.320	0.927	fence	9	4.76	1641.98	43.671852863	1641.98 43.671852863 -102.240954261
	1.18 0.401	36.985	0.654	fence	9	-6.43	1641.24	43.671849522	-6.43 1641.24 43.671849522 -102.241093228
	1.87 0.386	0.386 32.953	0.951	fence	9	-18.58	1641.30	43.671853778	-18.58 1641.30 43.671853778 -102.241243694
	0.02 0.184	3.564	0.938	fence	9	-27.51	1640.88	43.671852614	-27.51 1640.88 43.671852614 -102.241354557
	-0.06 0.183	3.515	0.965	fence	9	-43.82	1640.31	43.671852396	-43.82 1640.31 43.671852396 -102.241556846
-0.75	0.096	0.502	0.852	fence	9	-50.70	1640.11	43.671852662	-50.70 1640.11 43.671852662 -102.241642252
				fence	9	-56.13	1639.94	43.671852706	-56.13 1639.94 43.671852706 -102.241709520
				fence	9	-69.80	1638.65	43.671845269	1638.65 43.671845269 -102.241879434
-0.59	0.091	0.427	0.789	fence	9	-82.83	1638.82	43.671850659	-82.83 1638.82 43.671850659 -102.242040859
	-0.44 0.286	13.424	0.965	fence	9	-99.68	1638.14	43.671849585	-99.68 1638.14 43.671849585 -102.242249892
Q.	-0.38 0.215	5.717	0.980	fence	9	-108.00	1637.73	43.671848346	-108.00 1637.73 43.671848346 -102.242353166
\sim	-0.18 0.254	9.337	0.974	fence	9	-115.98	1637.54	1637.54 43.671849051	-102.242452046
×.	-0.30 0.262	10.297	0.973	fence	9	-135.26	1636.73	43.671847577	-135.26 1636.73 43.671847577 -102.242691271
0.51	0.210	5.328	0.862	fence	9	-151.58	1636.63	43.671851533	-151.58 1636.63 43.671851533 -102.242893543
21	-0.25 0.248	8.716	0.995	fence	9	-166.71	1635.81	43.671848710	1635.81 43.671848710 -102.243081417
\sim	-0.80 0.128	1.202	0.873	fence	9	-173.06	1635.52	1635.52 43.671847920	-102.243160192
0.13	3 0.120	0.985	0.808	fence	9	-181.99	1634.82	43.671844367	-181.99 1634.82 43.671844367 -102.243271122
-1.11		0.268 11.019	0.877	fence	9	-204.63	1634.06	43.671844245	-204.63 1634.06 43.671844245 -102.243551903
-0.86	3 0.278	12.316	0.927	fence	9	-212.37		43.671845018	1633.89 43.671845018 -102.243647856
1.30	0.322	19.055	0.850	fence	9	-219.59		1633.37 43.671842511	-102.243737618
-0.27		0.335 21.514	0.913	fence	9	-239.10	1632.43	43.671839899	-239.10 1632.43 43.671839899 -102.243979705

Targ ID	UTM X (m)	VTM Y (m)	Targ HAE (m)	Depth (m)		Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
417	722172.47	722172.47 4839117.36 759.52	759.52	-1.23	0.241	8.044	0.923	fence	9	-246.44	1632.55	43.671843156	-246.44 1632.55 43.671843156 -102.244070574
418	722161.92	418 722161.92 4839117.31 760.34	760.34	-0.36	0.251	8.998	0.985	fence	9	-256.99	1632.50	43.671845863	-256.99 1632.50 43.671845863 -102.244201313
419	722149.61	9	757.41	0.64	0.365	27.72	0.740	fence	9	-269.29	1631.88	43.671843990	1631.88 43.671843990 -102.244353980
421	722130.90	722130.90 4839119.91						fence	9	-288.00	1635.09	43.671878502	-288.00 1635.09 43.671878502 -102.244584498
422	722103.12	722103.12 4839115.19 760.97	760.97	-0.22	0.281	12.701	0.972	fence	9	-315.78	1630.38	43.671844388	-315.78 1630.38 43.671844388 -102.244930631
423	722089.35	722089.35 4839114.34 760.77	760.77	0.57	0.482	0.482 63.856	295.0	fence	9	-329.55	1629.53	43.671840837	-329.55 1629.53 43.671840837 -102.245101647
424	722063.92	722063.92 4839109.09						fence	9	-354.99		1624.27 43.671801185	-102.245418949
427	722031.93	722031.93 4839113.54 758.47	758.47	-1.17	0.241	8.013	996'0	fence	9	-386.97	1628.73	43.671850803	1628.73 43.671850803 -102.245813406
428	722020.85	428 722020.85 4839117.34						fence	9	-398.05	1632.53	43.671888334	-398.05 1632.53 43.671888334 -102.245949118
429	721814.65	429 721814.65 4839099.45						fence	9	-604.25	1614.64	43.671788962	-604.25 1614.64 43.671788962 -102.248511401
430	721796.12	721796.12 4839098.88						fence	9	-622.79	1614.07	43.671789369	-622.79 1614.07 43.671789369 -102.248741249
431	721757.61	721757.61 4839100.20 740.11	740.11	10.86	0.675	175.93	0.302	fence	9	-661.29	1615.39	43.671812740	-661.29 1615.39 43.671812740 -102.249217822
432	721595.38	721595.38 4839092.76						fence	9	-823.52	1607.94	43.671794177	-823.52 1607.94 43.671794177 -102.251230935
433	721449.41	721449.41 4839090.91						fence	9	-969.49	1606.09	43.671821040	-969.49 1606.09 43.671821040 -102.253040379
434	721140.90	721140.90 4839079.56						fence	9	-1278.00	1594.75	43.671810870	1594.75 43.671810870 -102.256867556
469	724078.85	724078.85 4838972.04						fence	9	1659.95	1487.23	43.669963926	1659.95 1487.23 43.669963926 -102.220510547
470	724074.90	470 724074.90 4838977.60						fence	9	1656.00	1492.78	43.670015065	1656.00 1492.78 43.670015065 -102.220557171
471	724067.46	724067.46 4838984.86						fence	9	1648.56	1500.05	43.670082625	1648.56 1500.05 43.670082625 -102.220646373
492	724161.56	724161.564838886.32						fence	9	1742.66	1401.50	43.669168000	1742.66 1401.50 43.669168000 -102.219521430
502	724232.35	724232.35 4838808.42						fence	9	1813.44	1323.61	43.668446101	1813.44 1323.61 43.668446101 -102.218676816
503		724232.63 4838804.90 731.55	731.55	0.00	0.208	5.156	0.841	fence	9	1813.73	1320.08	43.668414324	1813.73 1320.08 43.668414324 -102.218674765
504	724233.50	724233.50 4838794.45 731.25	731.25	-0.25	0.186	3.705	0.937	fence	9	1814.60	1309.63	43.668320069	1309.63 43.668320069 -102.218668312
505	724156.25	724156.25 4838650.59						fence	9	1737.34	1165.77	1165.77 43.667049604	-102.219685231
506	724157.39	724157.39 4838681.57 734.82	734.82	-0.46	0.294	14.573	0.972	fence	9	1738.49	1196.75	43.667327863	1738.49 1196.75 43.667327863 -102.219658163
207	724158.40	724158.40 4838694.61 735.63	735.63	0.00	0.193	4.122	0.914	fence	9	1739.50	1209.79	43.667444831	1739.50 1209.79 43.667444831 -102.219640260
508	724159.63	724159.63 4838707.02 737.28	737.28	0.19	0.289	0.289 13.795	0.855	fence	9	1740.73	1222.21	43.667556091	1740.73 1222.21 43.667556091 -102.219619829
509	724161.07	724161.07 4838722.63 739.35	739.35	-0.28	0.413	40.393	0.972	fence	9	1742.16	1237.82	1742.16 1237.82 43.667696042	-102.219595568
510	724161.45	724161.45 4838727.84 739.53	739.53	-0.38	0.305	0.305 16.208	0.892	fence	9	1742.55	1243.02	43.667742754	1742.55 1243.02 43.667742754 -102.219588623
511	724164.31	724164.31 4838753.85 738.75	738.75	0.16	0.448	0.448 51.271	0.920	fence	9	1745.41	1269.04	43.667975849	1745.41 1269.04 43.667975849 -102.219542403

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Depth Targ HAE (m) (m) (m)	Mom.	Fit Quality	Fit Analyst Comments Class.	UXO Class.	Local X Local Y (m) (m)	Local Y (m)	Latitude	Longitude
512	724165.34	724165.34 4838768.23 738.99		-0.39	0.218	5.943	0.994	fence	9	1746.44	1283.42	43.668104884	1746.44 1283.42 43.668104884 - 102.219523626
513	724167.00	513 724167.00 4838783.71 736.02 1.04	736.02	1.04	0.262	10.246	.262 10.246 0.926 fence	fence	9	1748.10	1298.90	43.668243588	1748.10 1298.90 43.668243588 -102.219496653
514	724169.75	514 724169.75 4838807.73 736.70	736.70	0.40	0.151	1.968	0.938 fence	fence	9	1750.84	1322.92	43.668458790	1750.84 1322.92 43.668458790 -102.219452693
515	724171.51	515 724171.51 4838827.80 735.12	735.12	1.29	0.222	6.237	0.844	fence	9	1752.60	1342.99	43.668638778	1752.60 1342.99 43.668638778 -102.219422512
516	724172.56	516 724172.56 4838836.36 737.03 -1.13	737.03	-1.13	0.139	1.528	1.528 0.825	fence	9	1753.66	1351.55	43.668715415	1753.66 1351.55 43.668715415 -102.219405921
538	724232.88	538 724232.88 4838735.22						fence	9	1813.97	1250.41	43.667787658	1813.97 1250.41 43.667787658 -102.218700649
539	724234.85	724234.85 4838717.42						fence	9	1815.95	1232.61	43.667626973	1815.95 1232.61 43.667626973 -102.218683582
540	724234.88	540 724234.88 4838707.95 730.75 -0.46	730.75	-0.46	0.144	1.703 0.975	0.975	fence	9	1815.98	1223.14	43.667541780	1815.98 1223.14 43.667541780 -102.218687150
541	724237.13	541 724237.13 4838693.36						fence	9	1818.23	1208.54	43.667409847	1818.23 1208.54 43.667409847 -102.218665355
71	723487.10	723487.10 4839573.47						fence	9	1068.20	2088.65	43.675550989	1068.20 2088.65 43.675550989 -102.227592997
V2	723484.22	V2 723484.22 4839577.17						fence	9	1065.31	2092.36	43.675585155	1065.31 2092.36 43.675585155 -102.227627224
V3	723477.53	723477.53 4839584.53						fence	9	1058.63	2099.71	43.675653336	1058.63 2099.71 43.675653336 -102.227706990
74	723472.98	V4 723472.98 4839588.80						fence	9	1054.07	2103.99	43.675693128	1054.07 2103.99 43.675693128 -102.227761685
1	723469.94	723469.94 4839591.22						fence	9	1051.03	2106.41	43.675715814	1051.03 2106.41 43.675715814 -102.227798326
9/	723465.23	723465.23 4839596.63						fence	9	1046.33	2111.82	43.675765897	1046.33 2111.82 43.675765897 -102.227854431
//	723463.56	V7 723463.56 4839599.91						fence	9	1044.65	2115.09	43.675795855	1044.65 2115.09 43.675795855 -102.227873778
N8	723457.48	723457.48 4839603.18						fence	9	1038.58	2118.37	43.675827139	1038.58 2118.37 43.675827139 -102.227947707
6/	723452.01	723452.01 4839607.74						fence	9	1033.11	2122.93	43.675869766	1033.11 2122.93 43.675869766 -102.228013578
V10	723430.63	V10 723430.63 4839631.71						fence	9	1011.73	2146.90	43.676091783	1011.73 2146.90 43.676091783 -102.228268562

Table B2 – MTADS Target Table for the South Portion of the Site

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
63	724105.14	724105.14 4837986.21	719.23	0.43	0.108	0.728	0.981	105mm	1	1686.23	501.40	43.661089966	501.40 43.661089966 -102.220594294
72	724114.21	724114.21 4837906.30 719.83	719.83	1.12	0.279	12.357	0.973	dig as 8-in	1	1695.31	421.48	43.660368532	421.48 43.660368532 -102.220515064
73	724086.48	724086.48 4837930.87	719.28	0.85	0.113	0.824	0.960	105mm	1	1667.57	446.05	43.660597865	446.05 43.660597865 -102.220848469
83	723881.45	723881.45 4837936.66 725.39	725.39	0.36	0.180	3.316	0.988	155mm nose down	_	1462.55	451.85	43.660711772	451.85 43.660711772 -102.223385885
V15	723881.44	723881.44 4837936.64		0.30	0.171	2.852	0.923	155mm part signature, Hmag targ#83	1	1462.54	451.83	43.660711572	451.83 43.660711572 -102.223385989
105	723829.32	723829.32 4837823.04 724.16	724.16	0.39	0.164	2.505	0.950	155mm	1	1410.41	338.23	43.659705619	-102.224078792
112	724101.02	724101.02 4837700.99 719.83	719.83	0.27	0.155	2.134	0.911	155mm on the surface	1	1682.12	216.18	43.658526143	216.18 43.658526143 -102.220763681
114	723973.75	723973.75 4837688.85 724.23	724.23	0.71	0.159	2.285	0.949	155mm	1	1554.85	204.04	43.658455270	204.04 43.658455270 -102.222345290
115	723943.26	723943.26 4837676.57 724.45	724.45	0.58	0.116	0.897	0.901	105mm	1	1524.35	191.76	43.658354049	191.76 43.658354049 -102.222728143
125	724072.73	724072.73 4837617.02 721.65	721.65	0.03	0.145	1.740	0.957	155mm	1	1653.83	132.21	132.21 43.657779453	-102.221149013
V70	724072.92	724072.92 4837617.17		0.26	0.122	1.042	0.954	155mm, Hmag targ #125	1	1654.02	132.36	43.657780757	132.36 43.657780757 -102.221146558
127	724110.97	724110.97 4837612.60	717.85	2.43	0.221	6.163	0.911	deep 8-in	1	1692.07	127.79	43.657728186	43.657728186 -102.220677116
128	724107.33	724107.33 4837589.42 721.07	721.07	0.71	0.242	8.146	0.960	8-in shallow	1	1688.42	104.61	43.657520828	104.61 43.657520828 -102.220731942
138	724135.55	724135.55 4837575.85 721.47	721.47	0.00	0.148	1.836	0.967	155mm on surface	1	1716.64	91.04	43.657390281	91.04 43.657390281 -102.220387978
166	724132.65	724132.65 4837327.11	722.13	0.77	0.140	1.560	0.966	155mm @ 2ft	_	1713.74	-157.71	-157.71 43.655154063	-102.220527198
181	724088.43	724088.43 4837006.95 721.83	721.83	1.88	0.163	2.477	996.0	155mm	_	1669.52	-477.86	43.652288109	-477 .86 43 .652288109 -102 .221207795
186	724247.92	724247.92 4837007.56 722.20	722.20	0.74	0.220	6.084	0.970	8-in	1	1829.02	-477.25	43.652245517	-477.25 43.652245517 -102.219231989
208	724220.15	724220.15 4836759.72 722.80	722.80	1.81	0.209	5.252	0.913	8-in	_	1801.25	-725.09	43.650024978	-725.09 43.650024978 -102.219678898
75	723974.38	723974.38 4838160.34		0.26	0.094	0.470	0.955	105mm, no Hmag data	1	1555.47	675.53	43.662695397	675.53 43.662695397 -102.222141904
V10	723930.36	723930.36 4837998.91		0.36	0.151	1.962	0.989	155mm, no Hmag data	1	1511.46	514.10	43.661256845	514.10 43.661256845 -102.222754143

Targ ID	UTM X (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V14	723887.91	723887.91 4837966.84		0:30	0.170	2.827	966.0	155mm, no Hmag data	_	1469.01	482.03	43.660981256	482.03 43.660981256 -102.223293322
V20	723802.49	723802.49 4837895.99		0.43	0.164	2.529	0.922	155mm, no Hmag data	_	1383.58	411.18	43.660369742	411.18 43.660369742 -102.224380937
V26	723749.19	723749.19 4837897.29		0.16	0.094	0.472	0.933	105mm, no Hmag data	_	1330.28	412.48	43.660397477	412.48 43.660397477 -102.225040657
V27	723747.70	723747.70 4837899.03		0.15	0.125	1.108	0.973	part signature, 155mm, no Hmag data	~	1328.80	414.22	43.660413616	414.22 43.660413616 -102.225058315
V42	723724.20	723724.20 4837857.90		0.31	0.152	2.017	0.956	155mm, no Hmag data	1	1305.29	373.08	43.660050728	373.08 43.660050728 -102.225366562
V43	723711.80	723711.80 4837847.31		0.14	0.122	1.032	0.958	155mm, no Hmag data	_	1292.89	362.50	43.659959247	-102.225524537
744	723715.31	723715.31 4837857.14		0.22	0.109	0.739	0.934	105mm in clutter, no Hmag data	_	1296.41	372.33	43.660046625	372.33 43.660046625 -102.225476926
V71	723621.14	723621.14 4837518.87		0.17	0.108	0.716	0.963	105mm, no Hmag data	_	1202.24	34.05	43.657032653	34.05 43.657032653 -102.226783569
775	724119.13	724119.13 4837319.54		1.03	0.164	2.517	0.889	155mm/8-in, no Hmag data	1	1700.23	-165.27	43.655090102	-165.27 43.655090102 -102.220697743
V78	724134.55	724134.55 4837182.15		0.15	0.089	0.396	0.986	105mm, no Hmag data	_	1715.64	-302.66	43.653849873	-302.66 43.653849873 -102.220563822
786	724053.78	724053.78 4837097.18		0.44	0.104	0.638	0.911	105mm, no Hmag data	1	1634.88	-387.63	43.653110051	-387.63 43.653110051 -102.221599462
V88	724020.44	724020.44 4837065.37		0.46	0.158	2.275	0.788	155mm, no Hmag data	_	1601.54	-419.45	43.652833954	-419.45 43.652833954 -102.222025633
V120		723640.96 4836719.33		0.58	0.184	3.552	0.975	8-in, no Hmag data	1	1222.06	-765.49	43.649836052	-765.49 43.649836052 -102.226869261
V121	723530.55	723530.55 4836678.32		0.26	0.154	2.077	0.987	155mm, no Hmag data	1	1111.65	-806.50	43.649500419	-806.50 43.649500419 -102.228253747
MP139	722787.75	MP139 722787.75 4836199.53		0.68	0.149	1.879	0.921	155mm, MP target, no Hmag data	~	368.85	-1285.29	43.645417236	368.85 -1285.29 43.645417236 -102.237651240

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
29	724012.70	724012.70 4838090.55 719.11	719.11	2.50	0.212	5.439	0.941	dig as 8-in	2	1593.80	605.73	43.662056192	605.73 43.662056192 -102.221696110
45	724077.97	724077.97 4838044.83 721.25	721.25	0.97	0.233	7.216	0.970	dig as 8-in	2	1659.07	560.01	43.661625322	560.01 43.661625322 -102.220906504
47	724081.02	724081.02 4838058.14 720.99	720.99	1.33	0.166	2.619	0.969	155mm	2	1662.11	573.33	43.661744161	-102.220863255
52	723983.98	723983.98 4838078.80 719.47	719.47	2.01	0.237	7.615	0.960	8-in	2	1565.08	593.99	43.661959198	593.99 43.661959198 -102.222056730
29	723988.86	723988.86 4837994.12 721.74	721.74	0.09	0.178	3.248	0.947	large target on surface	2	1569.96	509.31	43.661196172	509.31 43.661196172 -102.222031439
20	724158.64	724158.64 4837963.96 720.13	720.13	1.37	0.191	3.955	0.917	dig as 155mm	7	1739.74	479.15	479.15 43.660873761	-102.219940703
75	724077.52	724077.52 4837910.59 719.10	719.10	1.22	0.108	0.712	0.966	105mm	2	1658.61	425.78	43.660418220	425.78 43.660418220 -102.220967875
92	724059.09	724059.09 4837941.96 719.12	719.12	0.46	0.252	9.166	0.977	shallow 8-in	7	1640.19	457.15	43.660705904	457.15 43.660705904 -102.221183091
81	723926.85	723926.85 4837907.22 724.22	724.22	-0.62	0.146	1.782	0.960	155mm on surface	2	1507.94	422.41	43.660433316	422.41 43.660433316 -102.222835695
06	724036.98	724036.98 4837853.19 718.75	718.75	0.78	0.141	1.616	0.947	155mm	7	1618.07	368.38	368.38 43.659914202	-102.221493883
96	724041.63	724041.63 4837787.61 718.86	718.86	0.45	0.108	0.717	0.972	105mm	2	1622.72	302.80	43.659323006	302.80 43.659323006 -102.221463516
6	723978.52	723978.52 4837843.98 724.19	724.19	0.79	0.182	3.423	0.978	shallow 155mm	2	1559.61	359.17	43.659848993	359.17 43.659848993 -102.222221864
V35	723978.82	723978.82 4837844.78		0.66	0.188	3.815	0.940	8-in, Hmag targ #97	1	1559.92	359.97	43.659856118	359.97 43.659856118 -102.222217763
66	723986.36	723986.36 4837815.98 724.64	724.64	0.28	0.140	1.557	0.956	155mm	7	1567.46	331.17	331.17 43.659594855	-102.222136297
V61	723986.16	723986.16 4837816.13		0.05	0.149	1.909	0.871	155mm, Hmag targ #99	2	1567.26	331.31	331.31 43.659596201	-102.222138771
101	723915.16	723915.16 4837789.04 723.72	723.72	0.77	0.144	1.700	0.938	155mm	2	1496.26	304.23	304.23 43.659374007	-102.223029463
103	723866.39	723866.39 4837785.06 724.82	724.82	0.10	0.254	9.389	0.970	8-in on surface?	2	1447.48	300.24	43.659352843	300.24 43.659352843 -102.223635334
109	724167.01	724167.01 4837750.97 721.33	721.33	0.98	0.122	1.034	0.974	155mm	2	1748.10	266.15	43.658955674	266.15 43.658955674 -102.219925596
110	724242.46	724242.46 4837734.64 721.71	721.71	0.88	0.139	1.530	0.950	155mm	2	1823.56	249.82	43.658786050	249.82 43.658786050 -102.218997668
111	724116.46	724116.46 4837718.12 721.08	721.08	0.63	0.121	1.004	0.895	155mm	2	1697.56	233.31	43.658675546	233.31 43.658675546 -102.220565317
118	723909.80	723909.80 4837720.52 724.69	724.69	0.40	0.113	0.822	0.883	105mm	2	1490.89	235.70	43.658759329	235.70 43.658759329 -102.223124399
120	723897.78	723897.78 4837651.27 724.67	724.67	0.72	0.115	0.862	0.838	105mm	2	1478.87	166.46	43.658140183	166.46 43.658140183 -102.223301979
129	724129.66	724129.66 4837617.26 719.93	719.93	0.54	0.094	0.477	0.928	105mm	2	1710.76	132.44	43.657764440	132.44 43.657764440 -102.220443684
131	724161.32	724161.32 4837618.73 719.73	719.73	0.69	0.190	3.897	0.947	dig as 8-in at 2 ft	2	1742.41	133.92	43.657768162	133.92 43.657768162 -102.220050982

Targ ID	UTM X (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
137	724195.49	724195.49 4837595.91 720.18	720.18	00.00	0.139	1.542	0.946	155mm, on surface	2	1776.59	111.10	43.657552610	111.10 43.657552610 -102.219637149
145	724144.70	724144.70 4837542.81	720.85	1.33	0.122	1.049	0.937	105mm	2	1725.79	57.99	43.657090327	-102.220288356
153	723978.95	723978.95 4837435.48 723.97	723.97	1.43	0.193	4.087	0.882	8-in	2	1560.05	-49.34	43.656175000	-49.34 43.656175000 -102.222385968
154	723916.23	723916.23 4837430.58 724.38	724.38	0.56	0.128	1.204	0.938	155mm	2	1497.32	-54.23	-54.23 43.656149902	-102.223165003
155	723820.45	723820.45 4837481.10 725.06	725.06	0.97	0.131	1.278	0.936	155mm	2	1401.54	-3.72	43.656633009	-3.72 43.656633009 -102.224330441
163	724152.71	724152.71 4837360.42 722.64	722.64	0.00	0.122	1.049	0.858	155mm	2	1733.81	-124.39	-124.39 43.655447647	-102.220264776
164	724162.42	724162.42 4837323.54 722.35	722.35	0.54	0.177	3.177	0.826	shallow 155mm	2	1743.52	-161.28	43.655112994	-161.28 43.655112994 -102.220159857
774	724162.56	724162.56 4837322.98		0.51	0.172	2.912	0.960	155mm/8-in, Hmag targ #164	1	1743.66	-161.83	43.655107961	-161.83 43.655107961 -102.220158374
178	723674.56	723674.56 4837123.06 729.77	729.77	0.57	0.163	2.491	0.945	155mm	2	1255.66	-361.76	43.653456901	-361.76 43.653456901 -102.226285874
180	724079.88	724079.88 4837030.02 723.04	723.04	0.94	0.175	3.042	0.964	8-in	2	1660.98	-454.80	43.652498107	-102.221304052
V91	724080.05	724080.05 4837030.16		0.46	0.144	1.719	0.649	155mm, partial signature, Hmag targ #180	1	1661.14	-454.65	-454.65 43.652499371	-102.221301930
188	724293.50	724293.50 4836992.64 720.41	720.41	0.52	0.123	1.071	0.926	155mm	2	1874.60	-492.17	-492.17 43.652097571	-102.218673681
209	723972.82	723972.82 4836721.22 724.39	724.39	1.25	0.110	0.755	0.948	deep 105mm	2	1553.92	-763.59	43.649753250	-763.59 43.649753250 -102.222758208
213	723910.96	723910.96 4836700.97 724.09	724.09	96.0	0.133	1.335	0.918	155mm	2	1492.05	-783.85	43.649589696	-783.85 43.649589696 -102.223532802
220	723950.12	723950.12 4836690.38 724.58	724.58	1.24	0.109	0.739	0.953	105mm	2	1531.22	-794.44	43.649482646	-794.44 43.649482646 -102.223052137
221	723948.75	723948.75 4836667.76 724.69	724.69	1.09	0.106	0.684	0.927	105mm	2	1529.85	-817.05	43.649279675	-817.05 43.649279675 -102.223078447
222	723934.64	723934.64 4836675.40 724.85	724.85	0.87	0.101	0.580	0.950	105mm	2	1515.73	-809.41	43.649352635	-809.41 43.649352635 -102.223250146
225	723962.47	723962.47 4836678.61 724.73	724.73	1.04	0.106	0.687	0.811	105mm	2	1543.56	-806.20	43.649373152	-806.20 43.649373152 -102.222904088
226	723981.29	723981.29 4836683.95 724.43	724.43	1.30	0.121	1.018	0.923	105mm	2	1562.38	-800.86	43.649415515	-800.86 43.649415515 -102.222668774
253	723530.73	723530.73 4836161.05 723.83	723.83	0.72	0.229	6.878	0.974	8-in	2	1111.82	-1323.76	-1323.76 43.644848327	-102.228465620
254	723522.53	723522.53 4836152.60 724.73	724.73	0.00	0.165	2.558	0.943	155mm	2	1103.63	-1332.22	43.644774767	1103.63 -1332.22 43.644774767 -102.228570591
259	723553.16	723553.16 4836089.33 724.51	724.51	0.49	0.113	0.830	0.927	105mm	2	1134.25	-1395.48	43.644196586	-1395.48 43.644196586 -102.228217529
261	723924.64	723924.64 4836024.85 731.49	731.49	0.47	0.216	5.761	0.910	8-in	2	1505.74	-1459.96	43.643504975	1505.74 -1459.96 43.643504975 -102.223643634

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
295	724127.85	724127.85 4835859.79 734.80	734.80	0.59	0.103	0.617	0.970	105mm	2	1708.95	-1625.02	43.641959273	1708.95 -1625.02 43.641959273 -102.221195490
74	723980.18	723980.18 4838177.89		1.26	0.299	0.299 15.266	768.0	part signature, dig as 8-in, no Hmag data	2	1561.28	693.07	43.662851464	693.07 43.662851464 -102.222062677
V11	723926.08	723926.08 4837995.67		0.34	0.182	3.464	0.904	8-in, no Hmag data	2	1507.17	510.86	43.661229028	510.86 43.661229028 -102.222808557
V19	723803.19	723803.19 4837902.99		0.56	0.248	8.680	0.315	part signature, dig as 8-in, no Hmag data	2	1384.29	418.18	43.660432486	418.18 43.660432486 -102.224369319
V21	723798.54	723798.54 4837899.73		0.41	0.187	3.731	0.927	part signature, dig as 8-in, no Hmag data	2	1379.63	414.91	43.660404547	414.91 43.660404547 -102.224428280
V34	724011.13	724011.13 4837859.01		1.15	0.132	1.313	0.831	155mm, not an Hmag target	2	1592.22	374.20	43.659974353	374.20 43.659974353 -102.221811710
V38	723789.19	723789.19 4837853.38		0.33	0.147	1.822	0.981	155mm or fence post, No Hmag data	2	1370.28	368.57	43.659990566	368.57 43.659990566 -102.224563354
748	723719.69	723719.69 4837882.98		0.59	0.128	1.203	0.927	155mm, no Hmag data	2	1300.78	398.16	43.660277629	398.16 43.660277629 -102.225412038
V50	723696.62	723696.62 4837839.86		0.28	0.117	0.910	0.846	possible 105mm, no Hmag data	2	1277.72	355.05	43.659896814	43.659896814 -102.225715590
V63	723777.63	723777.63 4837806.80		0.21	0.117	0.924	0.958	105mm, no Hmag data	2	1358.73	321.98	43.659575085	-102.224725767
V64	723701.99	723701.99 4837816.51		0.21	0.115	0.862	0.962	105mm, no Hmag data	2	1283.09	331.70	331.70 43.659685231	-102.225658771
69/	723790.84	723790.84 4837660.39		0.62	0.096	0.512	0.932	105mm, no Hmag data	2	1371.93	175.58	43.658254418	175.58 43.658254418 -102.224622892
92/	724143.31	724143.31 4837236.42		0.50	0.176	3.118	0.415	155mm/8-in, no Hmag data	2	1724.41	-248.39	43.654335298	-248.39 43.654335298 -102.220432686
MP77	723625.20	MP77 723625.20 4837266.32		0.72	0.098	0.537	0.887	105mm, MP mag, no Hmag data	2	1206.30	-218.50	43.654760131	-218.50 43.654760131 -102.226837891

Targ ID	UTM X (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V81	724028.01	724028.01 4837159.88		09:0	0.153	2.066	0.386	155mm, no Hmag data	2	1609.11	-324.93	43.653681688	-324.93 43.653681688 -102.221892612
V89	724023.02	724023.02 4837061.86		0.42	0.115	0.875	0.723	105mm in clutter, no Hmag data	2	1604.12		43.652801659	-422.95 43.652801659 -102.221995140
V100	723736.05	723736.05 4836932.79		0.63	0.159	2.319	0.798	155mm/8-in part signature, no Hmag data	2	1317.15		43.651727222	-552.02 43.651727222 -102.225603038
MP110	724162.56	MP110 724162.56 4836798.90		1.46	0.185	3.606	0.911	155mm/8-in, MP targ, no Hmag data	2	1743.66		43.650394693	-685.91 43.650394693 -102.220375874
V126	723558.52	723558.52 4836525.09		0.21	0.098	0.535	0.955	105mm, no Hmag data	2	1139.62		-959.72 43.648113995	-102.227970684
V132	723125.46	723125.46 4836340.59		0.31	0.101	0.591	0.894	105mm, not an Hmag target	2	706.56	-1144.22	43.646584684	706.56 -1144.22 43.646584684 -102.233410547
V137	723084.60	723084.60 4836308.11		0.13	0.147	1.821	0.976	155mm touching clutter target on W, no Hmag data	2	69:299	-1176.70	43.646304845	665.69 -1176.70 43.646304845 -102.233930051
V138	723072.63	723072.63 4836292.33		1.34	0.169	2.745	0.546	155mm, no Hmag data	2	653.73	-1192.48	43.646166542	-1192.48 43.646166542 -102.234084777
V142	723409.96	723409.96 4836173.76		0.98	0.169	2.770	0.782	155mm, no Hmag data	2	991.06	-1311.05	43.644998932	991.06 -1311.05 43.644998932 -102.229955951
V143	723433.60	723433.60 4836171.60		0.79	0.149	1.888	0.986	155mm, no Hmag data	2	1014.70	-1313.22	43.644972357	1014.70 -1313.22 43.644972357 -102.229664146
V144	722951.00	722951.00 4836056.26		0.18	0.146	1.768	0.924	155mm, not an Hmag pick	2	532.09	-1428.56	43.644079830	532.09 -1428.56 43.644079830 -102.235688648
V145		723048.87 4836041.30		0.17	0.118	0.948	0.854	105mm, no Hmag data	2	629.96	-1443.52	43.643915935	629.96 -1443.52 43.643915935 -102.234482728
V147	723518.69	723518.69 4836018.63		1.05	0.139	1.543	0.958	155mm, no Hmag data	2	1099.78	-1466.19	43.643571040	1099.78 -1466.19 43.643571040 -102.228673662
7	724160.67	724160.67 4838416.30 717.79	717.79	1.43	0.278	0.278 12.295	0.975	partial signature, dig	က	1741.76		43.664941211	931.49 43.664941211 -102.219727766
15	724203.71	724203.71 4838419.96 720.34	720.34	0.89	0.282	0.282 12.838	0.954	8-in?	3	1784.81	935.15	43.664961170	935.15 43.664961170 -102.219193011

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments (UXO Class.	Local X Local Y (m) (m)	Local Y (m)	Latitude	Longitude
16	724109.23	724109.23 4838361.13					-	part signature wont fit, good target	3	1690.33	876.31	43.664460526	876.31 43.664460526 -102.220387893
17	724123.38	4838362.78 718.03	718.03	2.08	0.273	11.579	0.969	inverted, dig as 8- in	3	1704.48	877.97	43.664471132	877.97 43.664471132 -102.220211931
26	724149.23	724149.23 4838291.55 719.92	719.92	0.43	0.154	2.092	0.644	part signature, dig as 155mm	3	1730.33	806.74	43.663822731	806.74 43.663822731 -102.219921263
30	724043.31	4838093.94 721.74	721.74	0.26	0.113	0.833	0.900	unlikely 105mm	3	1624.41	609.12	43.662077446	609.12 43.662077446 -102.221315497
31	724078.47	724078.47 4838103.04 719.19	719.19	2.74	0.299	0.299 15.332	0.861	looks like 2 targets, dig as 8- in	3	1659.57	618.23	43.662148756	618.23 43.662148756 -102.220876105
33	724104.64	724104.64 4838098.03 721.80	721.80	0.41	0.178	3.238	0.946	possible 155mm	3	1685.74	613.21	43.662095756	613.21 43.662095756 -102.220554000
38	724128.52	724128.52 4838050.31	718.83	0.69	0.298	15.191	0.969	large for 8-in	3	1709.61	565.50	43.661659444	565.50 43.661659444 -102.220278058
39	724132.56	724132.56 4838029.21 719.27	719.27	0.47	0.141	1.619	0.956	low probability 155mm	3	1713.65	544.40	43.661468427	544.40 43.661468427 -102.220236762
40	724119.79	724119.79 4838041.74 719.26	719.26	0.04	0.302	15.826	0.969	large for 8-in	3	1700.88	556.92	43.661584922	556.92 43.661584922 -102.220389759
44	724075.71	724075.71 4838032.21 721.49	721.49	0.65	0.123	1.068	0.921	dig as 155mm	3	1656.81	547.40	43.661512580	547.40 43.661512580 -102.220939726
46	724083.33	724083.33 4838050.62 721.37	721.37	0.68	0.204	4.826	0.929	dig as 8-in	3	1664.43	565.81	43.661675810	565.81 43.661675810 -102.220837724
49	724093.54	724093.54 4838049.44 718.83	718.83	3.38	0.214	5.589	0.923	very deep 8-in	3	1674.64	564.63	43.661662132	564.63 43.661662132 -102.220711665
20	724071.43	724071.43 4838051.28 718.66	718.66	3.08	0.264	10.493	0.955	deep 8-in	3	1652.52	566.46	43.661685325	566.46 43.661685325 -102.220984915
51	724036.86	724036.86 4838049.97 720.63	720.63	1.37	0.189	3.836	0.926	inverted, dig as 8- in	3	1617.96	565.16	43.661684008	43.661684008 -102.221413610
54	723940.56	723940.56 4838041.24 722.76	722.76	90.0	0.112	0.802	0.894	low probability 105mm	ဗ	1521.66	556.43	43.661634502	556.43 43.661634502 -102.222610191
//	723940.57	723940.57 4838041.05		0.91	0.124	1.089	0.985	155mm, Hmag targ#54	1	1521.66	556.23	43.661632722	556.23 43.661632722 -102.222610224
99	723945.54	723945.54 4838009.11 723.05	723.05	0.26	0.207	5.035	0.881	complex overlapping targets	3	1526.64	524.30	43.661344054	524.30 43.661344054 -102.222561862

Targ ID	UTM X (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V91	723943.84	723943.84 4838008.63		0.29	0.149	1.904	0.794	targs touching, W one is 155mm, Hmag#56	2	1524.93	523.82	43.661340240	523.82 43.661340240 -102.222583161
28	723939.01	723939.01 4838005.20 723.59	723.59	0.05	0.184	3.538	0.832	overlapping with 56 and 57	က	1520.11	520.38	43.661310776	520.38 43.661310776 -102.22264371
09	723998.08	723998.08 4837982.00 721.73	721.73	0.31	0.100	0.580	0.818	low probability 105mm	3	1579.18	497.19	43.661084405	497.19 43.661084405 -102.221922262
61	724008.81	4837979.52 721.20	721.20	69.0	0.113	0.817	0.893	low probability 105mm	3	1589.91	494.71	43.661058859	43.661058859 -102.221790353
99	724187.19	724187.19 4838001.66 719.40	719.40	2.03	0.250	8.957	0.962	dig as 8-in	3	1768.29	516.85	43.661204189	516.85 43.661204189 -102.219571373
29	724215.28	724215.28 4837975.50 720.94	720.94	0.77	0.128	1.201	0.970	105/155mm	3	1796.38	490.69	43.660960444	490.69 43.660960444 -102.219234292
69	724210.71	4837945.59 719.66	719.66	2.49	0.201	4.650	0.957	deep 8-in	3	1791.80	460.78	43.660692822	460.78 43.660692822 -102.219303380
74	724075.16	724075.16 4837939.81	718.76	1.01	0.121	1.002	0.950	105mm	3	1656.26	455.00	43.660681725	455.00 43.660681725 -102.220984876
62	724015.83	724015.83 4837914.42 720.34	720.34	2.26	0.175	3.054	0.883	deep 155mm	3	1596.92	429.60	43.660471212	429.60 43.660471212 -102.221730464
V18	724015.96	724015.96 4837914.62		1.03	0.107	0.696	0.862	105mm, Hmag targ#79	3	1597.05	429.81	43.660473020	429.81 43.660473020 -102.221728775
08	723999.96	723999.96 4837961.82	722.35	69.0	0.088	0.395	0.940	small for 105mm	3	1581.06	477.00	43.660902293	-102.221907310
84	723868.06	723868.06 4837934.72						part signature, dig as 105mm	3	1449.16	449.90	43.660698310	449.90 43.660698310 -102.223552490
716	723866.40	723866.40 4837936.30		0:30	0.140	1.572	0.830	155mm, Hmag targ#84	2	1447.49	451.49	43.660713069	451.49 43.660713069 -102.223572475
98	723875.86	4837891.52 724.55	724.55		0.274	11.804	0.947	complex target, dig as 8-in	3	1456.95	406.71	43.660307504	-102.223473894
28	723980.57	723980.57 4837855.35						part signature, dig as 105mm	3	1561.67	370.54	43.659950640	370.54 43.659950640 -102.222191679
V36	723983.03	723983.03 4837857.79		1.99	0.310	0.310 17.036	0.913	looks like fence post, Hmag targ #87	9	1564.12	372.98	43.659971839	372.98 43.659971839 -102.222160294
88	724015.81	724015.81 4837856.35						part signature, dig as 105mm	3	1596.91	371.53	43.659948988	371.53 43.659948988 -102.221754719

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V33	724011.46	724011.46 4837857.06		0.51	0.376	0.376 30.488	0.804	too big for 8-in, Hmag targ #88	5	1592.56	372.25	43.659956692	372.25 43.659956692 -102.221808381
91	724064.19	724064.19 4837860.66 719.80	719.80	0.63	0.098	0.533	0.939	low probability 105mm	3	1645.29	375.84	43.659973165	375.84 43.659973165 -102.221153626
92	724103.08	724103.08 4837860.83 720.85	720.85	99.0	060.0	0.417	0.910	small for 105mm	3	1684.18	376.01	43.659962966	43.659962966 -102.220671819
93	724094.27	724094.27 4837853.84 720.74	720.74	0.38	0.091	0.433	0.932	small for 105mm	က	1675.37	369.02	43.659902769	369.02 43.659902769 -102.220783854
92	724040.45	724040.45 4837822.80 718.82	718.82	0.42	0.231	7.047	0.962	shallow 8-in	3	1621.54	337.98	43.659639816	337.98 43.659639816 -102.221463518
100	723971.72	723971.72 4837826.63 724.43	724.43	0.69	0.084	0.335	0.934	small for 105mm	3	1552.81	341.81	43.659694988	341.81 43.659694988 -102.222313336
V62	723971.26	723971.26 4837827.07		0.51	0.084	0.342	0.703	small for 105mm, Hmag targ #100	က	1552.35	342.25	43.659699083	342.25 43.659699083 -102.222318844
102	723888.30	723888.30 4837796.22 724.27	724.27	0.42	060.0	0.423	0.851	small for 105mm	3	1469.40	311.41	43.659446652	311.41 43.659446652 -102.223359218
106	723804.80	723804.80 4837836.78 725.41	725.41	0.29	0.133	1.331	0.969	155mm	3	1385.89	351.97	351.97 43.659836583	-102.224376826
107	723763.36	723763.36 4837825.83						partial signature wont fit, dig as 8- in	3	1344.46	341.01	43.659750510	341.01 43.659750510 -102.224894707
108	723887.67	723887.67 4837746.04 724.21	724.21	0.36	0.115	0.859	0.907	105mm	3	1468.77	261.23	261.23 43.658995561	-102.223387859
113	724023.99	724023.99 4837720.24 724.51	724.51	0.31	0.086	0.361	0.898	small for 105mm	3	1605.09	235.43	43.658722478	235.43 43.658722478 -102.221709918
116	723936.19	723936.19 4837701.80 724.43	724.43	0.71	0.102	0.603	0.889	105mm	3	1517.29	216.99	43.658583054	216.99 43.658583054 -102.222805190
117	723922.38	723922.38 4837670.18 724.71	724.71	0.66	0.092	0.443	0.864	105mm	က	1503.47	185.37	43.658302885	85.37 43.658302885 -102.222989424
119	723878.11	723878.11 4837661.26 722.17	722.17	3.20	0.185	3.643	0.924	unlikely deep 155mm	3	1459.21	176.45	43.658235950	176.45 43.658235950 -102.223541437
121	724021.51	724021.51 4837620.06 725.08	725.08	0.05	0.092	0.448	0.844	unlikely 105mm	3	1602.61	135.25	43.657822258	43.657822258 -102.221782207
132	724189.34	724189.34 4837620.61 719.83	719.83	0.42	0.319	0.319 18.540	0.889	part signature, 8- in?	လ	1770.44	135.79	43.657776549	135.79 43.657776549 -102.219703045
140	723951.65	723951.65 4837600.93 724.13	724.13	0.44	0.106	0.676	0.912	105mm	3	1532.75	116.11	43.657671200	116.11 43.657671200 -102.222655501
144	723798.10	723798.10 4837573.76 726.48	726.48	0.53	0.112	0.795	0.870	105mm	3	1379.19	88.94	43.657473073	88.94 43.657473073 -102.224568911
146	724349.32	724349.32 4837456.74 719.39	719.39	1.12	0.163	2.481	0.961	in the river?	3	1930.42	-28.07	43.656254628	-28.07 43.656254628 -102.217789409
147	724354.06	724354.06 4837444.46 719.36	719.36	1.07	0.143	1.663	0.943	in the river?	3	1935.16	-40.36	43.656142698	-40.36 43.656142698 -102.217735813

Targ ID	UTM X (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
152	724196.87	724196.87 4837463.10	722.12	0.00	0.083	0.325	0.749	small for 105mm	3	1777.97	-21.71	43.656357770	-21.71 43.656357770 -102.219675161
156	723827.34	723827.34 4837456.33 725.31	725.31	0.36	960'0	0.507	0.941	small for 105mm	3	1408.43	-28.48	43.656408232	-28.48 43.656408232 -102.224255396
157	723829.99	723829.99 4837444.66 725.33	725.33	0.00	0.111	0.773	0.825	105mm	3	1411.08	-40.16	43.656302432	-40.16 43.656302432 -102.224227405
158	723927.59	723927.59 4837416.88 725.35	725.35	0.01	0.113	0.817	996.0	105mm	3	1508.69	-67.94	43.656023194	-67.94 43.656023194 -102.223029881
160	724224.58	724224.58 4837377.86 722.18	722.18	0.34	0.095	0.488	0.937	small for 105mm	3	1805.67	-106.96	43.655582789	-106.96 43.655582789 -102.219367395
165	724167.64	724167.64 4837330.87						part signature, dig as 105mm	3	1748.73	-153.94	43.655177405	-153.94 43.655177405 -102.220092198
V73	724168.80	724168.80 4837330.26		0.75	0.171	2.878	0.940	8-in, Hmag targ #165	2	1749.90	-154.56	43.655171499	-154.56 43.655171499 -102.220077999
167	723837.98	723837.98 4837312.59 726.23	726.23	0.00	0.139	1.540	0.870	155mm	3	1419.08	-172.22	43.655112304	-102.224183090
170	724223.93	724223.93 4837223.23 722.10	722.10	0.92	0.282	12.805	0.961	low probability 8- in	3	1805.03	-261.58	43.654192387	-261.58 43.654192387 -102.219439606
171	723853.43	723853.43 4837151.17 725.89	725.89	1.61	0.123	1.077	0.880	155mm	3	1434.53	-333.64	-333.64 43.653655937	-102.224058640
172	723859.72	723859.72 4837145.98 726.02	726.02	0.93	0.103	0.630	0.746	105mm	3	1440.81	-338.83	43.653607324	-338.83 43.653607324 -102.223982971
173	724123.27	724123.27 4837154.37 723.27	723.27	0.47	0.145	1.758	0.857	155mm	3	1704.37	-330.45	43.653603362	-330.45 43.653603362 -102.220714994
V79	724123.15	724123.15 4837154.31		0.55	0.165	2.552	0.942	155mm, Hmag targ #173		1704.25	-330.50	43.653602908	-330.50 43.653602908 -102.220716485
174	724109.29	724109.29 4837141.98 722.42	722.42	0.83	0.092	0.452	906.0	small for 105mm	3	1690.39	-342.83	43.653496213	-102.220893283
V80	724109.29	724109.29 4837142.03		1.48	0.104	0.644	0.874	105mm, Hmag targ #174	2	1690.39	-342.78	43.653496664	-102.220893307
190	724217.27	724217.27 4836954.45 722.01	722.01	0.73	0.134	1.383	0.849	155mm	3	1798.36	-530.37	-530.37 43.651777066	-102.219633786
193	724151.06	724151.06 4836899.40 721.72	721.72	0.51	0.109	0.742	0.911	105mm	3	1732.15	-585.41	43.651302015	-585.41 43.651302015 -102.220476705
206	723977.66	723977.66 4836765.88 723.88	723.88	0.18	0.224	6.442	0.886	target in pile of clutter, dig as 8-in	3	1558.76	-718.93	43.650153442	-718.93 43.650153442 -102.222679682
210	723964.87	723964.87 4836745.32 723.59	723.59	0.43	0.131	1.289	0.875	155mm	3	1545.96	-739.49	43.649972350	-739.49 43.649972350 -102.222846712
211	723946.50	723946.50 4836726.08 721.62	721.62	3.73	0.240	7.857	0.681	8-in	3	1527.60	-758.73	43.649804841	-758.73 43.649804841 -102.223082159
212	723919.17	723919.17 4836705.22 724.60	724.60	0.86	0.105	0.668	0.876	105mm	3	1500.27	-779.59	43.649625506	-779.59 43.649625506 -102.223429273
217	723514.21	723514.21 4836757.91 721.71	721.71	0.05	0.119	0.973	0.954	105mm	3	1095.31	-726.91	43.650221135	-726.91 43.650221135 -102.228423187

Targ ID	(m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
223	723928.44	723928.44 4836671.97 724.88	724.88	0.52	0.091	0.433	0.910	105mm	3	1509.54	-812.84	43.649323677	-812.84 43.649323677 -102.223328298
224	723958.19	723958.19 4836680.33 724.65	724.65	0.74	0.111	0.775	0.912	105mm	3	1539.29	-804.49	43.649389840	-804.49 43.649389840 -102.222956310
227	724196.71	724196.71 4836696.86 725.21	725.21	0.00	0.085	0.348	0.713	105mm	3	1777.80	-787.96	43.649466660	-787.96 43.649466660 -102.219995372
229	724053.64	724053.64 4836638.31						partial signature, dig as 8-in	3	1634.73	-846.50	43.648983225	-846.50 43.648983225 -102.221791633
235	723365.68	723365.68 4836643.04 722.32	722.32	0.38	0.118	0.936	0.862	105mm	3	946.77	-841.77	43.649232679	-841.77 43.649232679 -102.230310386
238	723598.83	723598.83 4836528.54 726.25	726.25	0.73	0.187	3.758	0.953	8-in	3	1179.92	-956.28	43.648132855	-956.28 43.648132855 -102.227470106
255	723471.38	723471.38 4836150.24 725.34		-0.48	0.152	2.000	0.892	155mm	3	1052.48	-1334.57	43.644768948	1052.48 -1334.57 43.644768948 -102.229205016
256	723465.16	723465.16 4836155.22 725.39	725.39	-0.47	0.132	1.329	0.926	155mm	3	1046.26	-1329.59	43.644815606	046.26 -1329.59 43.644815606 -102.229280060
258	723548.56	723548.56 4836069.91 725.12	725.12	0.26	0.146	1.767	0.929	155mm	3	1129.66	-1414.90	43.644023316	1129.66 -1414.90 43.644023316 -102.228282415
V146		723538.31 4836063.19		1.14	0.242	8.109	0.887	8-in, Hmag targ #258	3	1119.40	-1421.63	43.643965906	1119.40 -1421.63 43.643965906 -102.228412253
262	723415.16	723415.16 4836002.34 726.25	726.25	0.46	0.279	12.386	0.922	8-in	3	996.26	-1482.47	43.643455692	-1482.47 43.643455692 -102.229962519
263	723034.39	723034.39 4835987.58 726.03	726.03	-0.41	0.164	2.500	906.0	part signature, 155mm	3	615.49	-1497.23	43.643437212	-1497.23 43.643437212 -102.234684208
284	723586.95	723586.95 4835931.69 723.29	723.29	0.72	0.174	3.027	0.883	155mm part signature	3	1168.05	-1553.13	43.642768628	-1553.13 43.642768628 -102.227864196
285	724199.29	724199.29 4835883.66 735.58	735.58	0.23	0.123	1.070	0.944	155mm	3	1780.39	-1601.15	43.642152413	1780.39 - 1601.15 43.642152413 - 102.220300896
286	723621.97	723621.97 4835910.15 729.13	729.13	0.42	0.252	9.129	0.857	unlikely 8-in	3	1203.07	-1574.66	43.642564428	-1574.66 43.642564428 -102.227439425
287	723618.10	723618.10 4835886.67 726.69	726.69	1.98	0.257	9.747	0.854	part signature, dig as 8-in	3	1199.20	-1598.14	43.642354416	1199.20 -1598.14 43.642354416 -102.227497091
294	723431.95	723431.95 4835825.96 723.43	723.43	0.39	0.144	1.696	0.892	155mm or fenceline clutter	3	1013.05	-1658.85	43.641864363	013.05 -1658.85 43.641864363 -102.229827486
V22	723792.79	723792.79 4837888.85		0.46	0.177	3.178	0.767	part signature, dig as 8-in, no Hmag data	က	1373.89	404.04	43.660308475	404.04 43.660308475 -102.224503998
V28	723696.86	723696.86 4837927.20		0.51	0.249	8.790	0.714	dig as 8-in, no Hmag data	3	1277.96	442.39	43.660682233	442.39 43.660682233 -102.225676428
V30	723711.52	723711.52 4837906.31		0.29	0.127	1.184	0.705	155mm, no Hmag data	က	1292.62	421.50	43.660489954	421.50 43.660489954 -102.225503526

Targ ID	(m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V31	723708.99	723708.99 4837898.33		0.52	0.106	069.0	0.925	part signature, 105mm, no Hmag data	3	1290.09	413.52	43.660418944	413.52 43.660418944 -102.225538159
V37	723860.19	723860.19 4837869.88		0.20	0.080	0.293	0.924	small for a 105mm, not an Hmag target	3	1441.28	385.07	43.660117574	385.07 43.660117574 -102.223676984
V39	723790.53	723790.53 4837866.14		0.27	0.180	3.346	0.976	155mm or fence post, no Hmag data	3	1371.62	381.33	43.660104933	381.33 43.660104933 -102.224541460
747	723718.36	723718.36 4837870.66		0.26	0.125	1.114	0.814	155mm in clutter pile, no Hmag data	က	1299.45	385.85	43.660167291	385.85 43.660167291 -102.225433616
749	723711.21	723711.21 4837882.71		0.22	0.187	3.755	0.882	8-in in clutter pile, no Hmag data	က	1292.30	397.90	43.660277808	397.90 43.660277808 -102.225517182
V52	723687.93	723687.93 4837859.85		09:0	0.179	3.295	0.580	unlikely 8-in in clutter, no Hmag data	3	1269.03	375.03	43.660079174	375.03 43.660079174 -102.225815007
V53	723701.55	723701.55 4837874.80		0:30	0.131	1.282	0.723	unlikely 155mm in clutter pile, no Hmag data	3	1282.65	389.98	43.660209513	389.98 43.660209513 -102.225640070
757	723686.73	723686.73 4837863.86		0.81	0.243	8.247	0.605	unlikely 8-in in clutter pile, no Hmag data	က	1267.83	379.05	43.660115618	379.05 43.660115618 -102.225828200
V58	723689.57	723689.57 4837867.56		0.36	0.133	1.354	0.875	unlikely 155mm in clutter, no Hmag data	က	1270.66	382.74	43.660148034	382.74 43.660148034 -102.225791538
V83	724081.26	724081.26 4837097.30		0.21	0.134	1.364	0.385	155mm in clutter pile, no Hmag data	က	1662.36	-387.51	43.653102851	-387.51 43.653102851 -102.221259039
V85	724054.98	724054.98 4837099.78		0:30	0.084	0.338	0.730	small for 105mm, no Hmag data	3	1636.08	-385.04	43.653132995	-385.04 43.653132995 -102.221583513

Targ ID	X MTU (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V87	723541.10	723541.10 4837099.52		3.10	0.227	6.655	0.774	deep 8-in, no Hmag data	3	1122.19	-385.29	43.653285353	-385.29 43.653285353 -102.227948747
96/	723776.66	723776.66 4836938.84		0.24	0.080	0.296	0.953	small for a 105mm, no Hmag data	ဗ	1357.76	-545.97	43.651769462	-545.97 43.651769462 -102.225097528
V98	723977.23	723977.23 4836891.26		0.58	0.101	0.596	0.914	inverted 105mm, no Hmag data	3	1558.32	-593.55	43.651281172	-593.55 43.651281172 -102.222633080
V102	723957.91	723957.91 4836883.95		2.74	0.241	8.042	0.922	deep 8-in, no Hmag data	3	1539.00	-600.86	43.651221246	-600.86 43.651221246 -102.222875446
V124	723523.39	723523.39 4836575.47		1.49	0.179	3.253	0.900	unlikely deep 8- in, no Hmag data	3	1104.48	-909.35	43.648577572	-909.35 43.648577572 -102.228385019
V127	723536.09	723536.09 4836475.03		0.23	0.163	2.477	0.813	unlikely 155 in clutter field, no Hmag data	3	1117.19	-1009.78	43.647670530	1117.19 -1009.78 43.647670530 -102.228269223
MP129	722909.12	MP129 722909.12 4836352.54		0.49	0.280	0.280 12.522	0.881	low probability 8- in, MP targ, no Hmag data	3	490.22	-1132.27	43.646757025	490.22 -1132.27 43.646757025 -102.236084988
V148	723557.07	723557.07 4835871.88		0.25	0.259	9.879	0.925	8-in, no Hmag data	3	1138.17	-1612.93	43.642239783	1138.17 -1612.93 43.642239783 -102.228258984
1	724287.74	4838559.87	718.67	0.88	0.249	8.862	0.993	likely not UXO	4	1868.83	1075.05	43.666194058	-102.218093900
2	724262.12	724262.12 4838545.42 718.48	718.48	1.30	0.244	8.346	0.904	incomplete signature, likely not UXO	4	1843.22	1060.61	43.666071849	1060.61 43.666071849 -102.218417239
3	724239.74	724239.74 4838550.64 717.54	717.54	1.75	0.506	0.506 74.115	0.952	partial signature, likely not UXO	4	1820.84	1065.83	43.666125548	43.666125548 -102.218692295
10	724176.33	724176.33 4838491.90 717.75	717.75	1.34	0.269	0.269 11.091	0.890	inverted likely not UXO	4	1757.43	1007.08	43.665616364	1007.08 43.665616364 -102.219502302
14	724223.91	724223.91 4838452.94 719.68	719.68	1.61	0.199	4.526	0.903	likely not UXO	4	1805.01	968.13	43.665251652	43.665251652 -102.218929032
18	724153.97	724153.97 4838375.17 717.60	717.60	1.09	0.283	0.283 12.959	0.993	inverted signature, dig	4	1735.06	890.36	43.664573330	890.36 43.664573330 -102.219827875

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
19	724168.52	724168.52 4838369.37 718.14	718.14	0.64	0.278	0.278 12.218	0.962	inverted signature, dig	4	1749.61	884.55	43.664516774	884.55 43.664516774 -102.219650005
28	723985.07	723985.07 4838140.16 718.87	718.87	2.46	0.272	0.272 11.488	0.881	inverted part signature, likely not UXO	4	1566.16	655.34	43.662510684	655.34 43.662510684 -102.222017843
98	724156.36	724156.36 4838081.89 719.09	719.09	0.24	0.140	1.565	0.944	inverted signature, likely not UXO	4	1737.46	597.08	43.661935046	597.08 43.661935046 -102.219919998
37	724142.77	724142.77 4838052.79 719.01	719.01	0.34	0.212	5.437	0.952	inverted, likely not UXO	4	1723.87	567.98	43.661677448	567.98 43.661677448 -102.220100427
41	724112.56	724112.56 4838028.84 718.79	718.79	0.62	0.317	0.317 18.194	0.956	inverted, large for 8-in	4	1693.65	544.02	43.661471099	544.02 43.661471099 -102.220484673
43	724091.54	724091.54 4838034.36 718.85	718.85	3.30	0.321	18.882	0.957	too big for 8-in	4	1672.64	549.55	43.661527107	-102.220742724
22	723952.01	723952.01 4838015.39 721.92	721.92	0.77	0.242	8.072	0.811	part signature, likely not UXO	4	1533.11	530.58	43.661398534	530.58 43.661398534 -102.222479087
8/	723952.03	723952.03 4838014.88		0.41	0.170	2.825	0.926	155mm, Hmag targ#55	1	1533.13	530.06	43.661393932	530.06 43.661393932 -102.222479071
62	724015.98	724015.98 4837972.18 720.68	720.68	1.92	0.126	1.155	0.828	looks like geology	4	1597.08	487.36	43.660990622	487.36 43.660990622 -102.221704585
64	724124.69	724124.69 4837985.10 719.40	719.40	98.0	0.286	13.389	0.990	inverted big for 8- in	4	1705.78	500.28	43.661074080	500.28 43.661074080 -102.220352597
65	724138.18	724138.18 4838000.54 718.99	718.99	0.98	0.329	0.329 20.334	0.981	too big for 8-in, dig it	4	1719.28	515.73	43.661208883	515.73 43.661208883 -102.220178997
71	724173.11	724173.11 4837975.27	719.50	1.91	0.181	3.413	0.931	likely not UXO	4	1754.20	490.46	490.46 43.660971107	-102.219756832
85	723763.94	723763.94 4837851.47 725.34	725.34	0.72	0.340	0.340 22.545	0.892	part signature, too big for UXO	4	1345.03	366.66	43.659980997	366.66 43.659980997 -102.224876936
89	724027.06	724027.06 4837866.21 719.48	719.48	-0.51	0.265	0.265 10.613	0.939	inverted part signature, likely not UXO	4	1608.15	381.40	43.660034337	381.40 43.660034337 -102.221611375
94	724234.12	724234.12 4837864.54 719.69	719.69	2.43	0.233	7.230	0.964	likely not UXO	4	1815.22	379.73	379.73 43.659956871	-102.219047020

Targ ID	X MTU (m)	(m)	Targ HAE	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
104	723840.44	723840.44 4837792.28 723.32	723.32	1.28	0.234	7.280	0.934	strongly inverted likely not UXO	4	1421.54	307.46	43.659425590	307.46 43.659425590 -102.223953780
123	724039.06	4837613.11 717.82	717.82	6.35	0.309	16.884	0.822	likely not UXO	4	1620.16	128.29	43.657754394	-102.221567710
136	724216.56	724216.56 4837572.07 719.48	719.48	0.57	0.304	0.304 16.066	0.950	inverted, likely not UXO	4	1797.66	87.25	43.657331795	87.25 43.657331795 -102.219385991
141	723931.58	723931.58 4837581.27 724.74	724.74	0.37	0.082	0.315	0.767	looks like clutter	4	1512.68	96.46	43.657500496	96.46 43.657500496 -102.222912279
142	723860.80	723860.80 4837570.05 724.36	724.36	1.11	0.134	1.391	0.711	looks like geology	4	1441.89	85.24	43.657420886	85.24 43.657420886 -102.223793764
143	723821.82	723821.82 4837550.28 725.13	725.13	99.0	0.313	17.517	0.929	too big for projo	4	1402.92	65.46	43.657254774	65.46 43.657254774 -102.224284720
159	724018.46	724018.46 4837412.11 723.80	723.80	1.51	0.155	2.145	0.921	inverted likely not UXO	4	1599.56	-72.70	43.655952969	-72.70 43.655952969 -102.221906302
182	724112.62	724112.62 4836984.96 722.66	722.66	0.92	0.229	6.872	0.969	inverted, likely not UXO	4	1693.72	-499.85	43.652083050	-499.85 43.652083050 -102.220917248
183	724229.21	724229.21 4837018.06 722.42		-0.30	0.230	6.920	0.891	inverted likely not UXO	4	1810.31	-466.75	-466.75 43.652345602	-102.219459419
189	724298.48	724298.48 4836978.04 720.02	720.02	0.61	0.357	26.006	0.978	too big for projo	4	1879.58	-506.77	-506.77 43.651964771	-102.218618067
191	724152.34	724152.34 4836996.12 722.47	722.47	0.34	0.145	1.742	0.955	inverted, likely clutter	4	1733.44	-488.69	-488.69 43.652171451	-102.220420596
192	724169.19	724169.19 4836920.08 721.26	721.26	1.91	0.274	11.729	0.982	target in the river?	4	1750.29	-564.74	-564.74 43.651482449	-102.220243485
205	723732.13	723732.13 4836794.56 721.08	721.08	0.59	0.225	6.490	0.974	inverted, likely not UXO	4	1313.23	-690.26	43.650485209	-690.26 43.650485209 -102.225708856
207	723970.48	723970.48 4836760.99 723.89	723.89	80.0	0.278	12.275	0.952	target in clutter, likely not UXO	4	1551.57	-723.83	43.650111555	-723.83 43.650111555 -102.222770757
216	723626.44	723626.44 4836722.76 724.43	724.43	-0.54	0.379	31.015	0.994	too big for projo	4	1207.54	-762.06	-762.06 43.649871261	-102.227047664
218	723400.23	723400.23 4836671.31 721.81	721.81	0.33	0.104	0.643	0.949	looks like clutter	4	981.33	-813.51	43.649476516	-813.51 43.649476516 -102.229870679
219	723942.29	723942.29 4836684.54 724.36	724.36	1.06	0.131	1.297	0.844	looks like clutter	4	1523.39	-800.27	43.649432532	-800.27 43.649432532 -102.223151522
230	723846.27	723846.27 4836629.16 721.35	721.35	5.39	0.444	49.938	0.832	looks like geology	4	1427.37	-855.66	43.648963355	-855.66 43.648963355 -102.224363753
237	723198.22	723198.22 4836571.59 720.97	720.97	1.18	0.202	4.699	0.968	inverted likely not UXO	4	779.32	-913.22	-913.22 43.648640377	-102.232413903
249	723116.49	723116.49 4836360.69 724.79	724.79	2.14	0.160	2.320	0.892	likely not UXO	4	697.58	-1124.13	43.646768120	697.58 -1124.13 43.646768120 -102.233513374

Targ ID	UTM X (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments (UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
250	723349.40	723349.40 4836308.25	722.85	0.37	0.090	0.424	0.885	looks like clutter	4	930.50	-1176.56	43.646226648	-102.230650379
252	723517.53	723517.53 4836176.35 723.76	723.76	0.54	0.184	3.533	0.942	inverted, likely not UXO	4	1098.62	-1308.46	43.644989927	-1308.46 43.644989927 -102.228622780
257	723101.21	723101.21 4836140.11 722.97	722.97	3.02	0.287	13.537	0.883	inverted, likely not UXO	4	682.30	-1344.70	43.644788940	682.30 -1344.70 43.644788940 -102.233793695
V141	723103.10	723103.10 4836140.46		2.12	0.172	2.926	0.616	8-in, part signature, Hmag targ #257	7	684.20	-1344.35	43.644791506	684.20 -1344.35 43.644791506 -102.233770068
260	723567.96	723567.96 4836099.05 724.59	724.59	0.00	0.285	13.280	0.951	inverted likely not UXO	4	1149.06	-1385.77	43.644279494	1149.06 -1385.77 43.644279494 -102.228030101
264	722950.57	722950.57 4835932.44 727.14	727.14	0.00	0.327	19.979	0.965	large object in fenceline	4	531.66	-1552.37	43.642966430	-1552.37 43.642966430 -102.235745050
265	723520.24	723520.24 4835892.76 722.74	722.74	0.29	0.294	14.508	0.952	fence?	4	1101.34	-1592.05	-1592.05 43.642438610	-102.228706471
266	723493.85	723493.85 4835875.73 722.96	722.96	0.53	0.191	3.974	0.919	fence?	4	1074.95	-1609.08	43.642293394	1074.95 - 1609.08 43.642293394 - 102.229040349
267	723477.52	723477.52 4835864.58 723.02	723.02	0.52	0.239	7.773	0.967	fence?	4	1058.62	-1620.24	43.642197969	1058.62 - 1620.24 43.642197969 - 102.229247216
268	723465.20	723465.20 4835854.18 723.45	723.45	0.03	0.278	12.279	0.979	fence?	4	1046.30	-1630.63	43.642108156	1046.30 -1630.63 43.642108156 -102.229404059
271	723518.65	723518.65 4835936.53 722.84	722.84	0.32	0.212	5.445	0.979	inverted likely not UXO	4	1099.75	-1548.28	43.642832752	-1548.28 43.642832752 -102.228708088
272	723512.37	723512.37 4835926.18 721.02	721.02	2.57	0.264	0.264 10.573	0.846	fence?	4	1093.46	-1558.63	43.642741566	1093.46 -1558.63 43.642741566 -102.228790182
278	723491.56	723491.56 4835891.50 723.32	723.32	0.65	0.157	2.195	0.985	looks like clutter	4	1072.65	-1593.32	43.642435864	1072.65 - 1593.32 43.642435864 - 102.229062244
279	723485.59	723485.59 4835882.35 723.19	723.19	0.00	0.134	1.383	0.977	looks like clutter	4	1066.68	-1602.46	43.642355423	1066.68 - 1602.46 43.642355423 - 102.229139961
289	723495.73	723495.73 4835922.87 724.40	724.40	0.07	0.061	0.129	0.358	likely not UXO	4	1076.82		43.642716795	-1561.94 43.642716795 -102.228997634
291	723405.92	723405.92 4835837.51 723.76	723.76	0.00	0.265	10.664	0.978	inverted, likely not UXO	4	987.01	-1647.30	43.641976040	987.01 -1647.30 43.641976040 -102.230145142
292	723409.25	723409.25 4835826.84 722.57	722.57	1.45	0.134	1.379	0.769	likely clutter	4	990.35	-1657.97	43.641879103	990.35 -1657.97 43.641879103 -102.230108244
293	723386.82	723386.82 4835838.65 723.58	723.58	2.39	0.234	7.284	0.901	likely clutter	4	967.92	-1646.16	43.641992030	967.92 -1646.16 43.641992030 -102.230381139
V17	723844.65	723844.65 4837944.77		0.20	0.108	0.720	0.930	likely not UXO, no Hmag data	4	1425.75	459.95	43.660795745	459.95 43.660795745 -102.223838327
V23	723779.55	723779.55 4837891.01		0.37	0.233	7.267	0.823	inverted likely not UXO	4	1360.64	406.20	43.660331903	406.20 43.660331903 -102.224667150

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X Local Y (m) (m)	Local Y (m)	Latitude	Longitude
V29	723685.28	723685.28 4837909.37		0.48	0.243	8.187	0.772	likely not UXO, no Hmag data	4	1266.38	424.56	43.660525358	424.56 43.660525358 -102.225827285
V32	723707.53	723707.53 4837893.94		0.18	0.147	1.810	0.986	looks like fencepost, no Hmag data	4	1288.63	409.13	43.660379903	409.13 43.660379903 -102.225558029
V40	723791.56	723791.56 4837878.65		0.28	0.208	5.171	0.858	part signature, likely not UXO, no Hmag data	4	1372.66	393.83	43.660217050	393.83 43.660217050 -102.224523456
741	723757.63	723757.63 4837866.78		0.15	0.073	0.224	0.933	small for 105mm, no Hmag data	4	1338.72	381.96	43.660120527	381.96 43.660120527 -102.224948758
746	723717.25	723717.25 4837867.25		0.15	0.089	0.402	0.953	likely clutter pile, no Hmag data	4	1298.35	382.44	43.660136926	382.44 43.660136926 -102.225448665
V54	723699.07	723699.07 4837874.33		0.33	0.183	3.479	0.884	likely not UXO in clutter pile, no Hmag data	4	1280.17	389.51	43.660206051	389.51 43.660206051 -102.225670992
V55	723699.36	723699.36 4837872.86		0.43	0.184	3.565	0.917	likely not UXO in clutter pile, no Hmag data	4	1280.45	388.04	43.660192737	388.04 43.660192737 -102.225668043
N56	723686.41	723686.41 4837873.51		0.41	0.180	3.336	0.703	inverted, likely not UXO in clutter, no Hmag data	4	1267.51	388.70	43.660202528	388.70 43.660202528 -102.225828176
MP60	723618.66	MP60 723618.66 4837856.87		0.49	0.265	0.265 10.603	0.718	too large for 8-in, MP data, no Hmag data	4	1199.76	372.06	43.660073256	372.06 43.660073256 -102.226674270
99/	723676.28	723676.28 4837833.72		0.35	0.112	0.796	0.876	inverted, likely not UXO, no Hmag data	4	1257.38	348.90	43.659847692	348.90 43.659847692 -102.225970114
768	723744.94	723744.94 4837768.59		0.84	0.122	1.030	0.769	two targets, likely not UXO, no Hmag data	4	1326.04	283.77	43.659241290	283.77 43.659241290 -102.225146562
V84	724080.81	724080.81 4837092.36		0:30	0.130	1.250	0.729	looks like clutter, no Hmag data	4	1661.91	-392.45	43.653058531	-392.45 43.653058531 -102.221266646

Targ ID	UTM X (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
795	723433.44	723433.44 4837013.15		1.16	0.154	2.086	0.954	inverted likely not UXO, no Hmag data	4	1014.53	-471.67	43.652540904	-471.67 43.652540904 -102.229317994
767	723988.78	723988.78 4836890.27		1.41	0.228	6.743	0.942	inverted, likely not UXO, no Hmag data	4	1569.88	-594.54	43.651268797	-594.54 43.651268797 -102.222490415
66/	723988.11	723988.11 4836914.08		0.22	0.081	0.305	0.698	inverted, likely not UXO, no Hmag data	4	1569.21	-570.73	43.651483123	-570.73 43.651483123 -102.222488850
V116	724097.38	V116 724097.38 4836749.41						rt signature MP targ, likely not UXO, no Hmag data	4	1678.48		43.649969216	-735.40 43.649969216 -102.221203710
V122	723499.90	723499.90 4836680.62		1.04	0.147	1.822	0.944	inverted likely not UXO, no Hmag data	4	1081.00		43.649530310	-804.20 43.649530310 -102.228632371
V123	723476.84	723476.84 4836672.72		1.04	0.248	8.714	0.982	inverted, likey not UXO, no Hmag data	4	1057.94	-812.09	43.649466235	-812.09 43.649466235 -102.228921296
V125	-	723563.48 4836517.31		1.36	0.283	0.283 12.932	0.888	likely too big for 8-in, no Hmag data	4	1144.58		43.648042475	-967.51 43.648042475 -102.227912531
V128	722929.07	722929.07 4836442.74		0.70	0.135	1.411	0.948	inverted likely not UXO, no Hmag data	4	510.16	-1042.07	43.647562281	510.16 -1042.07 43.647562281 -102.235800725
V140	722765.13	722765.13 4836215.14		0.73	0.150	1.940	0.873	inverted part signature, likely not UXO, no Hmag data	4	346.23	-1269.68	43.645564402	346.23 -1269.68 43.645564402 -102.237924944
တ	724222.13	724222.13 4838486.09 719.59	719.59	0.97	0.369	0.369 28.634	0.874	too big for projo	5	1803.23	1001.27	43.665550290	1001.27 43.665550290 -102.218937288
13	724231.28	724231.28 4838459.03 720.63	720.63	1.31	0.234	7.321	0.807	0.807 likely not UXO	5	1812.37	974.21	43.665304175	974.21 43.665304175 -102.218835254
32	724073.50	724073.50 4838092.73 719.52	719.52	1.93	0.228	992.9	0.894	likely not UXO	2	1654.59	607.91	43.662057452	607.91 43.662057452 -102.220942065

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
42	724105.11	724105.11 4838030.25 718.19	718.19	2.53	0.383	0.383 32.244	0.881	likely not UXO	2	1686.20	545.44	43.661486084	545.44 43.661486084 -102.220576388
48	724071.47	724071.47 4838078.07 721.13	721.13	0.44	0.300	0.300 15.507	0.955	inverted signature, too big for 8-in	5	1652.57	593.26	43.661926286	593.26 43.661926286 -102.220973227
53	723967.63	723967.63 4838028.08 719.60	719.60	2.23	0.257	9.664	0.957	mostly remnant, likely clutter	2	1548.73	543.26	43.661507952	543.26 43.661507952 -102.222280314
22	723944.16	723944.16 4838004.69 723.57	723.57	0.03	0.189	3.831	0.887	overlapping with other targs, this is likely clutter	2	1525.26	519.87	43.661304653	519.87 43.661304653 -102.222580816
89	724221.87	724221.87 4837917.92 717.69	717.69	4.10	0.350	24.516	0.792	likely not UXO	2	1802.97	433.11	43.660440660	433.11 43.660440660 -102.219176571
77	724042.69	724042.69 4837930.21 717.65	717.65	2.58	0.413	0.413 40.380	0.898	likely geology	2	1623.79	445.40	43.660605189	445.40 43.660605189 -102.221391080
78	724036.85	724036.85 4837920.45 718.59	718.59	2.70	0.311	17.147	0.722	likely geology	2	1617.94	435.64	435.64 43.660519162	-102.221467563
82	723902.79	723902.79 4837926.91 724.80	724.80	-0.80	0.191	4.001	0.529	looks like several pieces of scrap	5	1483.88	442.10	43.660617628	442.10 43.660617628 -102.223125620
86	724000.15	724000.15 4837819.69 724.09	724.09	0.83	0.079	0.279	0.896	too small for projo	2	1581.25	334.88	334.88 43.659624023	-102.221963987
122	724027.42	724027.42 4837613.29 722.84	722.84	1.63	0.190	3.942	0.491	looks like clutter	2	1608.52	128.47	43.657759536	128.47 43.657759536 -102.221711786
124	724046.13	724046.13 4837590.55 724.46	724.46	0.71	0.743	234.14	0.979	Water sampling well?	5	1627.22	105.73	43.657549376	105.73 43.657549376 -102.221489545
126	724068.52	724068.52 4837657.24 716.31	716.31	4.12	0.300	0.300 15.437	0.656	looks like geology	2	1649.61	172.42	43.658142419	172.42 43.658142419 -102.221184515
130	724141.14	724141.14 4837642.14 719.59	719.59	0.28	0.385	32.526	0.985	too big for projo	2	1722.24	157.32	43.657984729	157.32 43.657984729 -102.220291185
139	724012.73	724012.73 4837579.56 724.47	724.47	0.17	0.089	0.404	0.645	looks like clutter	2	1593.83	94.74	43.657460624	94.74 43.657460624 -102.221907782
177	723745.09	723745.09 4837083.13 728.25	728.25	0.25	0.142	1.625	0.877	looks like clutter	2	1326.18	-401.68	43.653076627	-401.68 43.653076627 -102.225428870
179	723825.18	723825.18 4837051.64 719.82	719.82	6.43	0.496	69.855	0.639	not UXO	5	1406.28	-433.17	43.652769306	-433.17 43.652769306 -102.224449861
187	724259.51	724259.51 4837007.61 720.63	720.63	1.81	0.455	53.689	0.685	too big for projo	2	1840.61	-477.20	43.652242447	-477.20 43.652242447 -102.219088472
195	723365.84	723365.84 4836717.58 721.40	721.40	0.55	0.228	6.745	0.946	fence?	2	946.94	-767.23	-767.23 43.649903041	-102.230277467
196	723373.91	723373.91 4836722.03 721.21	721.21	1.29	0.195	4.212	0.913	fence?	2	955.01	-762.78	43.649940656	-762.78 43.649940656 -102.230175712
197	723384.53	723384.53 4836732.25 721.45	721.45	0.90	0.333	21.057	0.937	fence?	2	965.63	-752.56	43.650029352	-752.56 43.650029352 -102.230039983
198	723415.66	723415.66 4836750.45 721.49	721.49	0.93	0.089	0.403	0.885	fence?	5	996.76	-734.36	43.650183669	-734.36 43.650183669 -102.229646827
199	723462.89	723462.89 4836764.48 721.40	721.40	0.85	0.256	9.559	0.977	fence?	2	1043.98	-720.33	43.650295698	-720.33 43.650295698 -102.229056108

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)		Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
200	723475.45	723475.45 4836767.72 721.62	721.62	0.65	0.274	11.754	0.982	fence?	2	1056.54	-717.09	-717.09 43.650321068	-102.228899227
201	723487.74	723487.74 4836767.79 721.72	721.72	0.21	0.103	0.619	0.914	fence?	2	1068.83	-717.02	43.650317996	-717.02 43.650317996 -102.228746976
202	723459.11	723459.11 4836772.55						fenceline clutter?	2	1040.20	-712.26	43.650369378	-712.26 43.650369378 -102.229099623
203	723460.60	723460.60 4836748.32 719.90	719.90	2.72	0.184	3.544	0.730	fenceline clutter?	2	1041.70	-736.49	43.650151020	-736.49 43.650151020 -102.229091141
204	723460.13	723460.13 4836742.18 721.80	721.80	0.44	0.140	1.554	0.926	fenceline clutter?	2	1041.22	-742.64	43.650095904	-742.64 43.650095904 -102.229099554
215	723646.77	723646.77 4836736.83 718.70	718.70	3.76	1830	88.312	0.510	too big for projo	2	1227.86	-747.99	43.649991701	-747.99 43.649991701 -102.226790097
231	723804.46	723804.46 4836637.32 720.79	720.79	80.9	0.379	31.130	0.898	looks like geology	2	1385.55	-847.49	43.649049334	-847.49 43.649049334 -102.224878248
232	723791.59	723791.59 4836641.22 722.41	722.41	4.20	0.303	0.303 15.842	0.841	looks like geology	2	1372.68	-843.60	43.649088246	-843.60 43.649088246 -102.225036040
233	723783.48	723783.48 4836639.06 721.81	721.81	2.07	0.415	40.837	0.804	looks like geology	2	1364.57	-845.75	-845.75 43.649071313	-102.225137374
234	723767.30	723767.30 4836635.74 722.57	722.57	4.19	0.233	7.208	0.716	looks like geology	2	1348.39	-849.07	43.649046312	-849.07 43.649046312 -102.225339159
236	723233.27	723233.27 4836598.39 719.35	719.35	2.73	0.324	19.406	0.147	too big for projo	2	814.36	-886.42	-886.42 43.648870874	-102.231968818
247	723095.92	723095.92 4836349.42						partial signature, fence?	5	677.01	-1135.40	43.646672942	-1135.40 43.646672942 -102.233772797
V130		723094.91 4836351.25		0.58	0.372	0.372 29.358	0.929	too big for 8-in, fence post, Hmag targ # 247	9	676.00	-1133.56	43.646689757	676.00 -1133.56 43.646689757 -102.233784520
251	723596.44	723596.44 4836279.79 722.10	722.10	6.46	0.463	0.463 56.901	0.910	looks like geology	2	1177.53	-1205.03	43.645896434	1177.53 -1205.03 43.645896434 -102.227602698
273	723498.91	723498.91 4835909.50 723.09	723.09	0.64	0.381	31.721	0.820	fence?	2	1080.01	-1575.31	43.642595573	1080.01 -1575.31 43.642595573 -102.228963681
274	723497.18	723497.18 4835907.43 723.52	723.52	0.49	0.276	0.276 11.965	0.702	fence?	2	1078.28	-1577.39	43.642577432	1078.28 -1577.39 43.642577432 -102.228986022
276	723484.56	723484.56 4835900.52 723.34	723.34	0.43	0.281	12.662	0.886	fence?	2	1065.66	-1584.30	43.642519082	1065.66 - 1584.30 43.642519082 - 102.229145160
277	723489.91	723489.91 4835906.82						fence?	5	1071.01	-1577.99	43.642574180	1071.01 -1577.99 43.642574180 -102.229076255
280	723480.69	723480.69 4835888.59						fence?	2	1061.78	-1596.22	43.642413019	1061.78 -1596.22 43.642413019 -102.229198075
288	723554.17	723554.17 4835916.61 723.18	723.18	0.00	0.102	0.606	0.740	looks like clutter	5	1135.27	-1568.20	43.642642907	1135.27 -1568.20 43.642642907 -102.228276387
290	723364.57	723364.57 4835827.49 726.98	726.98	0.62	0.410	39.460	0.989	not UXO	5	945.66	-1657.32	43.641898385	945.66 -1657.32 43.641898385 -102.230661372
297	724263.06	724263.06 4835834.77 738.33	738.33	-0.79	0.334	21.281	0.964	fenceline clutter	2	1844.15	-1650.04	43.641693545	-1650.04 43.641693545 -102.219531489
306	724174.27	724174.27 4835832.20 737.42	737.42	-1.21	0.338	0.338 22.135	0.987	fenceline clutter	5	1755.36	-1652.61	43.641697185	1755.36 -1652.61 43.641697185 -102.220632127
337	723850.25	723850.25 4835824.31 734.16	734.16	0.00	0.184	3.580	0.818	fenceline clutter	2	1431.34	-1660.51	43.641723723	1431.34 -1660.51 43.641723723 -102.224648013
357	723421.25	723421.25 4835804.89 723.33	723.33	0.20	0.313	0.313 17.603	0.977	fenceline clutter	5	1002.34	-1679.92	43.641678077	1002.34 -1679.92 43.641678077 -102.229968785

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X Local Y (m) (m)	Local Y (m)	Latitude	Longitude
391	723013.68	723013.68 4835867.08 727.33	727.33	0.70	0.253	9.213	0.951	8-in or clutter in fenceline	2	594.78	-1617.74	43.642359628	594.78 -1617.74 43.642359628 -102.234990367
V32	724017.79	724017.79 4838203.41		0.34	0.072	0.213	0.919	too small for 105mm, no Hmag data	5	1598.89	718.59	43.663069655	718.59 43.663069655 -102.221586188
9/	723968.99	723968.99 4838152.79		0.19	0.070	0.196	0.957	too small for 105mm, no Hmag data	5	1550.09	86.798	43.662629150	667.98 43.662629150 -102.222211723
V12	723917.22	723917.22 4837988.81		0.33	0.210	5.325	0.901	looks like fencepost, no Hmag data	5	1498.32	503.99	43.661169944	503.99 43.661169944 -102.222921101
V24	723779.15	723779.15 4837888.32		0.02	0.060	0.124	0.722	too small for 105mm, no Hmag data	5	1360.24	403.51	43.660307841	403.51 43.660307841 -102.224673238
V25	723749.23	723749.23 4837908.10		0.10	0.072	0.210	0.939	too small for 105mm, no Hmag data	5	1330.33	423.28	43.660494658	423.28 43.660494658 -102.225035576
745	723714.79	723714.79 4837865.16		0.40	0.068	0.177	0.645	looks like clutter, no Hmag data	5	1295.89	380.35	43.660118889	380.35 43.660118889 -102.225480059
V51	723687.09	723687.09 4837842.76		0.16	0.135	1.397	0.830	looks like trash, no Hmag data	5	1268.19	357.95	43.659925767	357.95 43.659925767 -102.225832446
MP59	723625.13	MP59 723625.13 4837856.63		0.00	0.063	0.146	0.742	too small for 105mm, MP data, no Hmag data	5	1206.22	371.82	43.660069170	371.82 43.660069170 -102.226594303
75	723703.20	723703.20 4837802.34		0.06	0.077	0.260	0.809	too small for 105mm, no Hmag data	5	1284.30	317.53	43.659557410	317.53 43.659557410 -102.225649653
79/	723681.87	723681.87 4837834.92		0.31	0.140	1.574	0.325	looks like clutter pile, no Hmag data	2	1262.97	350.11	43.659856825	350.11 43.659856825 -102.225900388

Targ ID	UTM X (m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
V72	723983.69	723983.69 4837360.41		0.29	990.0	0.164	0.971	too small for 105mm, no Hmag data	5	1564.79	-124.40	43.655498460	-124.40 43.655498460 -102.222358420
V82	724036.92	724036.92 4837141.00		0.00	0.078	0.268	0.912	too small for 105mm, no Hmag data	2	1618.01	-343.81	43.653509205	-343.81 43.653509205 -102.221790173
06/	724021.04	724021.04 4837061.15		0.20	0.082	0.321	0.529	looks like clutter, no Hmag data	5	1602.13	-423.67	43.652795819	-423.67 43.652795819 -102.222020021
V92	724015.77	724015.77 4837023.46		0.83	0.156	2.172	0.346	looks like clutter, no Hmag data	5	1596.86	-461.35	43.652458502	-461.35 43.652458502 -102.222100921
V93	724015.91	724015.91 4837020.36		0.44	860.0	0.543	0.317	looks like clutter, no Hmag data	5	1597.01	-464.45	43.652430550	-464.45 43.652430550 -102.222100407
V94	724018.75	724018.75 4837016.03		0.31	0.147	1.829	0.407	looks like clutter, no Hmag data	5	1599.84	-468.79	43.652390704	-468.79 43.652390704 -102.222067075
V103	723798.00	V103 723798.00 4836859.43		1.76	0.307	0.307 16.615	0.303	looks like several pieces of clutter, no Hmag data	2	1379.10	-625.38	43.651048818	-625.38 43.651048818 -102.224866131
V104	723763.97	V104 723763.97 4836839.17		0.63	0.272	0.272 11.456	0.737	inverted likely not UXO, no Hmag data	5	1345.06		43.650876884	-645.64 43.650876884 -102.225296121
7114		724248.22 4836770.01		1.46	0.302	0.302 15.710	996.0	too big for 8-in, no Hmag data	2	1829.32	-714.80	43.650109026	-714.80 43.650109026 -102.219326927
V136		723119.05 4836330.69		1.13	0.503	0.503 72.962	0.581	partial signature, likely clutter, no Hmag data	5	700.15	-1154.12	43.646497574	700.15 -1154.12 43.646497574 -102.233494013
4	724249.89	724249.89 4838518.61	717.20	3.21	0.374	0.374 29.994	0.846	fence	9	1830.99	1033.80	43.665834414	1033.80 43.665834414 -102.218579912
2	724241.59	724241.59 4838508.09 717.96	717.96	0.83	0.322	0.322 19.066	0.755	fence	9	1822.69	1023.28	43.665742336	1023.28 43.665742336 -102.218687121
9	724242.59	724242.59 4838498.80 721.81	721.81	-1.07	0.189	3.836	0.870	fence	9	1823.68	1013.99	43.665658456	1013.99 43.665658456 -102.218678640
7	724241.25	724241.25 4838493.88 721.69	721.69	-1.04	0.167	2.648	0.638	fence	9	1822.35	1009.06	43.665614591	1009.06 43.665614591 -102.218697209
8	724243.11	724243.11 4838484.18 720.38	720.38	1.55	0.331	0.331 20.768	0.680	fence	9	1824.21	999.37	43.665526855	999.37 43.665526855 -102.218678160

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
12	724240.87	724240.87 4838471.45 723.10		-0.40	0.177	3.180	0.903	fence	9	1821.96	986.63	43.665412990	986.63 43.665412990 -102.218711296
20	724242.98	724242.98 4838289.35						fence	9	1824.08	804.54	43.663774715	804.54 43.663774715 -102.218760788
21	724242.83	724242.83 4838283.52						fence	9	1823.92	798.70	43.663722252	798.70 43.663722252 -102.218765096
22	724242.98	724242.98 4838273.97						fence	9	1824.08	789.16	43.663636399	789.16 43.663636399 -102.218767179
23	724243.28	724243.28 4838264.15						fence	9	1824.38	779.34	43.663547939	779.34 43.663547939 -102.218767498
24	724243.44	724243.44 4838255.18						fence	9	1824.53	770.36	43.663467208	770.36 43.663467208 -102.218769344
25	724243.13	724243.13 4838247.63						fence	9	1824.23	762.82	43.663399422	762.82 43.663399422 -102.218776244
27	724243.13	724243.13 4838232.30						fence	9	1824.23	747.48	43.663261533	747.48 43.663261533 -102.218782615
34	724247.61	724247.61 4838062.41						fence	9	1828.71	577.59	43.661732296	577.59 43.661732296 -102.218797691
32	724246.40	724246.40 4838037.91						fence	9	1827.49	553.10	553.10 43.661512381	-102.218822922
133	724263.78	724263.78 4837636.46 722.73		0.12	0.370	0.370 29.036	0.957	fence	9	1844.88	151.64	43.657896663	151.64 43.657896663 -102.218774355
134	724264.76	724264.76 4837586.20 723.58		-0.72	0.492	67.946	966.0	fence beside river	9	1845.86	101.39	43.657444386	101.39 43.657444386 -102.218783123
135	724270.76	724270.76 4837578.17 724.15		-0.59	0.185	3.649	0.901	fence beside river	9	1851.86	93.36	43.657370390	93.36 43.657370390 -102.218712079
148	724263.76	724263.76 4837476.39 721.71	721.71	0.44	0.183	3.493	0.976	fence	9	1844.86	-8.42	43.656457111	-8.42 43.656457111 -102.218841085
149	724266.19	724266.19 4837458.52 719.54	719.54	2.67	0.253	9.233	0.826	fence	9	1847.28	-26.29	43.656295690	-26.29 43.656295690 -102.218818483
150	724264.70	724264.70 4837449.72 719.77	719.77	2.79	0.517	0.517 79.199	0.775	fence	9	1845.79	-35.10	43.656216935	-35.10 43.656216935 -102.218840578
151	724264.24	724264.24 4837395.50 720.81	720.81	1.59	0.280	12.531	0.977	fence	9	1845.33	-89.32	-89.32 43.655729461	-102.218868817
161	724268.68	724268.68 4837363.23 721.86	721.86	0.49	0.224	6.389	0.843	fence	9	1849.78	-121.59	43.655437916	-121.59 43.655437916 -102.218827186
162	724269.57	724269.57 4837351.47 722.10	722.10	0.29	0.413	40.185	0.983	fence	9	1850.67	-133.34	-133.34 43.655331897	-102.218821005
168	724278.36	724278.36 4837270.03 720.86	720.86	2.08	2.086	2.086 5190.2	0.780	fence	9	1859.46	-214.78	43.654596870	-214.78 43.654596870 -102.218745971
169	724273.62	724273.62 4837222.56 722.57	722.57	0.29	0.435	0.435 46.975	0.718	fence	9	1854.71	-262.25	43.654171336	-262.25 43.654171336 -102.218824450
175	724275.37	724275.37 4837180.05 722.49	722.49	0.24	0.261	10.158	0.521	fence	9	1856.47	-304.77	43.653788458	-304.77 43.653788458 -102.218820387
176	724278.05	724278.05 4837132.63 722.17	722.17	0.30	0.767	257.51	0.924	fence	9	1859.15	-352.19	43.653361208	-352.19 43.653361208 -102.218806892
184	724265.46	724265.46 4837059.88 722.57	722.57	0.09	0.161	2.385	0.914	fence	9	1846.55	-424.93	43.652710785	-424.93 43.652710785 -102.218993108
185	724274.65	724274.65 4837060.21						fence	9	1855.75	-424.60	43.652710934	-424.60 43.652710934 -102.218879096
194	724288.76	724288.76 4836923.18 720.30	720.30	0.25	0.247	8.594	0.931	fence	9	1869.85	-561.64	43.651474287	-561.64 43.651474287 -102.218761287
214	723657.92	723657.92 4836742.26 721.21	721.21	1.03	0.542	91.155	0.731	o big for projo	9	1239.01	-742.56	43.650037156	-742.56 43.650037156 -102.226649770

Targ ID	UTM X (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)		Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
228	724274.24	724274.24 4836639.04	724.57	0.44	0.292	14.255	606.0	fence	9	1855.33	-845.77	43.648923334	-102.219059147
239	724281.87	724281.87 4836486.79						fence	9	1862.96	-998.02	43.647551761	-998.02 43.647551761 -102.219027867
240	724283.54	724283.54 4836474.54						fence	9	1864.63	-1010.27	43.647441116	1864.63 - 1010.27 43.647441116 - 102.219012259
241	724282.78	724282.78 4836466.28						fence	9	1863.87	-1018.53	43.647367064	1863.87 -1018.53 43.647367064 -102.219025095
242	724284.30	724284.30 4836453.18						fence	9	1865.39	-1031.63	43.647248780	1865.39 - 1031.63 43.647248780 - 102.219011723
243	724283.69	724283.69 4836447.34						fence	9	1864.78	-1037.47	43.647196454	1864.78 - 1037.47 43.647196454 - 102.219021672
244	724283.99	724283.99 4836437.00						fence	9	1865.09	-1047.82	43.647103298	1865.09 - 1047.82 43.647103298 - 102.219022206
245	724283.69	724283.69 4836428.03						fence	9	1864.78	-1056.79	43.647022705	1864.78 - 1056.79 43.647022705 - 102.219029695
246	724284.30	724284.30 4836418.77						fence	9	1865.39	-1066.04	43.646939275	1865.39 -1066.04 43.646939275 -102.219026014
248	723100.64	723100.64 4836342.58 726.15	726.15	-1.19	0.151	1.971	0.441	partial signature, fence?	9	681.74	-1142.24	43.646609992	681.74 -1142.24 43.646609992 -102.233717065
V131	723101.16	723101.16 4836342.43		0.62	0.318	0.318 18.310	0.428	too big for 8-in, fence post, Hmag targ #248	9	682.26	-1142.38	43.646608527	682.26 -1142.38 43.646608527 -102.233710685
269	723438.51	723438.51 4835819.61	718.44	4.94	099'0	164.65	0.293	fence?	9	1019.61	-1665.21	43.641805238	-1665.21 43.641805238 -102.229748876
270	723436.19	723436.19 4835815.50 722.91	722.91	0.39	0.300	0.300 15.421	0.780	fence?	9	1017.29	-1669.31	43.641769021	1017.29 - 1669.31 43.641769021 - 102.229779350
275	723491.89	723491.89 4835902.84						fence?	9	1072.98	-1581.98	43.642537726	1072.98 - 1581.98 43.642537726 - 102.229053451
281	723478.67	723478.67 4835895.79 721.66	721.66	2.08	0.472	0.472 60.183	0.622	fence?	9	1059.77	-1589.03	43.642478319	1059.77 -1589.03 43.642478319 -102.229220032
282	723462.86	723462.86 4835903.24 727.33	727.33	-0.69	0.326	0.326 19.802	0.895	fence?	9	1043.96	-1581.57	43.642550091	1043.96 -1581.57 43.642550091 -102.229412732
283	723457.47	723457.47 4835907.80 727.09	727.09	-0.48	0.378	30.848	0.921	fence?	9	1038.57	-1577.01	43.642592720	1038.57 -1577.01 43.642592720 -102.229477601
296	724269.06	724269.06 4835827.15 736.42	736.42	1.42	0.482	0.482 64.181	0.677	fence	9	1850.16	-1657.67	43.641623150	1850.16 -1657.67 43.641623150 -102.219460270
298	724257.58	724257.58 4835830.54					-	fence	9	1838.68	-1654.27	43.641657131	1838.68 - 1654.27 43.641657131 - 102.219601069
299	724239.96	724239.96 4835826.13						fence	9	1821.06	-1658.69	43.641622739	1821.06 -1658.69 43.641622739 -102.219821109
300	724235.71	724235.71 4835828.69						fence	9	1816.80	-1656.12	43.641647075	1816.80 -1656.12 43.641647075 -102.219872714
301	724225.23	724225.23 4835827.27						fence	9	1806.32	-1657.55	43.641637426	1806.32 -1657.55 43.641637426 -102.220003102
302	724215.48	724215.48 4835833.37 737.20	737.20	0.00	0.353	0.353 25.075	0.981	fenceline clutter	9	1796.57	-1651.44	43.641695256	1796.57 -1651.44 43.641695256 -102.220121283
303	724220.44	724220.44 4835828.69						fence	9	1801.54	-1656.12	43.641651676	1801.54 -1656.12 43.641651676 -102.220061765
304	724200.46	724200.46 4835826.99 736.56	736.56	0.47	0.311	0.311 17.145	0.624	fence	9	1781.56	-1657.83	43.641642392	1781.56 -1657.83 43.641642392 -102.220309903

Targ ID	(m)	VTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Мот.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
305	724183.86	724183.86 4835826.47 737.05	737.05	-0.59	0.259	996.6	0.979	fence	9	1764.96	-1658.34	43.641642737	1764.96 -1658.34 43.641642737 -102.220515689
307	724171.76	724171.76 4835828.12						fence	6	1752.85	-1656.69	43.641661224	1752.85 -1656.69 43.641661224 -102.220664892
308	724158.75	724158.75 4835825.81	737.09	-0.74	0.186	3.673	0.896	fence	9	1739.85	-1659.00	43.641644357	-1659.00 43.641644357 -102.220826903
309	724149.72	724149.72 4835825.61 736.81	736.81	-0.88	0.188	3.774	0.931	fence	9	1730.82	-1659.20	43.641645310	1730.82 -1659.20 43.641645310 -102.220938822
310	724141.98	724141.98 4835825.23 735.72	735.72	0.00	0.310	17.085	0.977	fence	6	1723.08	-1659.59	43.641644158	-1659.59 43.641644158 -102.221034870
311	724128.77	724128.77 4835823.85						fence	9	1709.87	-1660.97	43.641635754	1709.87 -1660.97 43.641635754 -102.221199013
312	724121.36	724121.36 4835824.66 736.43	736.43	-1.00	0.221	6.149	0.969	fence	6	1702.46	-1660.16	43.641645243	-1660.16 43.641645243 -102.221290395
313	724124.02	724124.02 4835830.97 735.92	735.92	-0.85	0.399	36.298	0.977	fenceline clutter	9	1705.11	-1653.84	43.641701241	-1653.84 43.641701241 -102.221254927
314	724107.04	724107.04 4835823.68 732.76	732.76	3.16	0.473	0.473 60.403	0.397	fence	9	1688.13	-1661.13	43.641640818	1688.13 - 1661.13 43.641640818 - 102.221468246
315	724090.95	724090.95 4835823.61	735.89	0.98	0.325	0.325 19.648	0.937	fence	6	1672.04	-1661.21	43.641644988	1672.04 -1661.21 43.641644988 -102.221667499
316	724076.14	724076.14 4835824.84						fence	6	1657.23	-1659.97	43.641660573	1657.23 -1659.97 43.641660573 -102.221850400
317	724053.28	724053.28 4835823.03 736.38	736.38	-0.61	0.269	11.105	0.993	fence	6	1634.37	-1661.78	43.641651175	-1661.78 43.641651175 -102.222134261
318	722418.90	722418.90 4837484.81 738.73	738.73	-3.19	0.000	0.000	0.000	fence	9	0.00	0.00	43.657087000	0.00 43.657087000 -102.241690000
319	724034.87	724034.87 4835822.72 736.10		-0.44	0.288	0.288 13.644	0.963	fence	9	1615.97	-1662.09	43.641653895	-1662.09 43.641653895 -102.222362280
320	724028.33	724028.33 4835822.58 736.16	736.16	-0.73	0.337	21.964	0.988	fence	6	1609.43	-1662.23	43.641654632	1609.43 - 1662.23 43.641654632 - 102.222443319
321	724020.58	724020.58 4835822.34 736.27		-0.45	0.213	5.551	0.980	fence	6	1601.67	-1662.47	43.641654778	1601.67 -1662.47 43.641654778 -102.222539509
322	724014.30	724014.30 4835821.96 736.42	736.42	-0.97	0.263	10.430	0.989	fence	6	1595.40	-1662.85	43.641653240	-1662.85 43.641653240 -102.222617355
323	724003.88	724003.88 4835821.79 736.38	736.38	-0.72	0.269	11.068	0.963	fence	6	1584.98	-1663.03	43.641654835	1584.98 -1663.03 43.641654835 -102.222746438
324	723986.41	723986.41 4835821.20 736.15	736.15	-0.77	0.297	14.928	0.975	fence	6	1567.51	-1663.62	43.641654796	-1663.62 43.641654796 -102.222963076
325	723979.35	723979.35 4835821.06 736.12	736.12	-0.32	0.304	0.304 16.017	0.989	fence	6	1560.44	-1663.76	43.641655664	1560.44 -1663.76 43.641655664 -102.223050621
326	723967.64	723967.64 4835820.87 735.94	735.94	-0.51	0.308	0.308 16.755	0.987	fence	6	1548.74	-1663.94	43.641657487	1548.74 -1663.94 43.641657487 -102.223195615
327	723961.28	723961.28 4835820.48 735.98	735.98	-0.64	0.341	22.585	0.985	fence	6	1542.38	-1664.34	43.641655871	1542.38 -1664.34 43.641655871 -102.223274595
328	723949.54	723949.54 4835820.61 735.97	735.97	-0.52	0.294	14.599	0.957	fence	9	1530.64	-1664.20	43.641660596	1530.64 -1664.20 43.641660596 -102.223419875
329	723941.03	723941.03 4835825.99 735.41	735.41	-0.42	0.410	39.333	0.980	fenceline clutter	6	1522.13		43.641711580	-1658.82 43.641711580 -102.223523044
330	723943.06	723943.06 4835820.05 736.07		-1.05	0.275	11.827	0.965	fence	6	1524.15	-1664.76	43.641657544	1524.15 -1664.76 43.641657544 -102.223500441
331	723931.24	723931.24 4835819.95 735.77	735.77	-0.55	0.311	17.215	0.962	fence	6	1512.33	-1664.87	43.641660164	-1664.87 43.641660164 -102.223646865
332	723924.95	723924.95 4835819.81 735.56	735.56	-0.61	0.308	0.308 16.724	0.963	fence	9	1506.04	-1665.00	43.641660832	1506.04 -1665.00 43.641660832 -102.223724798

Targ ID	UTM X (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
333	723914.51	723914.51 4835820.29 735.32	735.32	-0.71	0.364	27.603	0.853	fence	9	1495.60	-1664.53	-1664.53 43.641668248	-102.223853886
334	723909.79	723909.79 4835813.46 725.42	725.42	9.21	1.152	874.4	0.439	fence	9	1490.88	-1671.36	43.641608246	.36 43.641608246 -102.223915194
335	723878.20	723878.20 4835818.34 734.48		-0.23	0.215	5.669	0.837	fence	9	1459.30	-1666.47	43.641661652	1459.30 - 1666.47 43.641661652 - 102.224304297
336	723851.67	723851.67 4835816.42 734.29	734.29	0.00	0.311	17.161	0.831	fence	9	1432.77	-1668.39	-1668.39 43.641652387	-102.224633684
338	723811.88	723811.88 4835817.37 733.99	733.99	0.00	0.172	2.918	0.955	fence	9	1392.97	-1667.44	43.641672885	1392.97 - 1667.44 43.641672885 - 102.225126053
339	723771.35	723771.35 4835818.58						fence	9	1352.45	-1666.23	43.641695959	-1666.23 43.641695959 -102.225627421
340	723761.82	723761.82 4835815.63 734.41		-0.57	0.146	1.795	0.813	fence	9	1342.91	-1669.18	43.641672338	1342.91 - 1669.18 43.641672338 - 102.225746740
341	723759.07	723759.07 4835821.53 733.44	733.44	0.00	0.393	34.634	0.963	fenceline clutter	9	1340.16	-1663.29	43.641726163	1340.16 - 1663.29 43.641726163 - 102.225778325
342	723740.21	723740.21 4835813.88						fence	9	1321.31	-1670.93	43.641663060 ₁	-1670.93 43.641663060 -102.226014994
343	723702.69	723702.69 4835815.73						fence	9	1283.79	-1669.08	43.641690992	1283.79 -1669.08 43.641690992 -102.226478859
344	723688.38	723688.38 4835813.96 732.56	732.56	0.00	0.256	9.583	0.933	fence	9	1269.48	-1670.86	43.641679355	1269.48 - 1670.86 43.641679355 - 102.226656868
345	723678.75	723678.75 4835814.25 732.88 -0.66	732.88	99.0-	0.210	5.259	0.887	fence	9	1259.85	-1670.56	43.641684907	1259.85 - 1670.56 43.641684907 - 102.226775948
346	723672.52	723672.52 4835813.75 732.26		-0.52	0.259	9.951	0.956	fence	9	1253.62	-1671.06	-1671.06 43.641682238	-102.226853317
347	723662.26	723662.26 4835813.12 731.93	731.93	-0.27	0.190	3.927	0.972	fence	9	1243.36	-1671.70	43.641679626	1243.36 -1671.70 43.641679626 -102.226980648
348	723657.14	723657.14 4835813.04 731.86	731.86	0.00	0.185	3.638	0.902	fence	9	1238.24	-1671.77	43.641680530	-1671.77 43.641680530 -102.227044120
349	723667.04	723667.04 4835819.22 731.35	731.35	0.43	0.361	26.903	0.944	fenceline clutter	9	1248.14	-1665.59	43.641733131	1248.14 -1665.59 43.641733131 -102.226918896
320	723627.30	723627.30 4835814.26						fence	9	1208.39	-1670.55	43.641700426	1208.39 -1670.55 43.641700426 -102.227413202
351	723613.17	723613.17 4835813.55						fence	9	1194.27	-1671.27	43.641698268	1194.27 - 1671.27 43.641698268 - 102.227588440
352	723598.81	723598.81 4835813.55						fence	9	1179.91	-1671.27	43.641702583 ₁	179.91 -1671.27 43.641702583 -102.227766204
353	723509.47	723509.47 4835809.51	725.78	0.28	0.261	10.162	0.955	fence	9	1090.57	-1675.30	-1675.30 43.641693153	-102.228874273
354	723469.05	723469.05 4835812.97 723.06 -0.54	723.06	-0.54	0.158	2.255	0.907	fence	9	1050.14	-1671.84	43.641736381	1050.14 -1671.84 43.641736381 -102.229373485
355	723451.66	723451.66 4835819.90 723.24		-0.27	0.139	1.537	0.623	fence	9	1032.76	-1664.91	-1664.91 43.641803937	-102.229585950
326	723423.51	723423.51 4835814.18 721.99	721.99	1.70	0.422	0.422 43.108	0.249	fence	9	1004.60	-1670.64	43.641760915	004.60 -1670.64 43.641760915 -102.229936961
358	723411.88	723411.88 4835807.96 723.51	723.51	0.14	0.300	300 15.389	0.956	fence	9	992.98	-1676.86	43.641708478	-1676.86 43.641708478 -102.230083517
329	723405.31	723405.31 4835808.31 723.48		-0.36	0.350	0.350 24.492	0.927	fence	9	986.41	-1676.51	43.641713597	986.41 -1676.51 43.641713597 -102.230164734
360	723398.95	723398.95 4835807.55 723.31	723.31	0.62	0.300	0.300 15.384	0.918	fence	9	980.05	-1677.26	43.641708677	980.05 - 1677.26 43.641708677 - 102.230243815
361	723392.46	723392.46 4835807.59 723.57	723.57	0.00	0.244	8.323	0.915	fence	9	973.56	-1677.23	43.641710961	973.56 -1677.23 43.641710961 -102.230324129

Targ ID	UTM X (m)	UTM Y (m)	Targ HAE (m)	Depth (m)	Targ Caliber (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
362	723385.99	723385.99 4835807.24 724.35	724.35	0.05	0.264	0.264 10.561	. 996.0	fence	9	967.08	-1677.57	43.641709811	967.08 - 1677.57 43.641709811 - 102.230404479
363	723394.14	723394.14 4835819.15 723.51	723.51	0.71	0.250	8.921	0.852	fenceline clutter	9	975.23	-1665.66	43.641814484	975.23 -1665.66 43.641814484 -102.230298614
364	723371.41	723371.41 4835806.16 725.65	725.65	-1.68	0.365	27.751	0.903	fence	9	952.51	-1678.65	43.641704456	-1678.65 43.641704456 -102.230585404
365	723367.02	723367.02 4835810.98						fenceline clutter	9	948.11	-1673.83	43.641749161	948.11 -1673.83 43.641749161 -102.230637837
366	723345.54	723345.54 4835805.21	725.98	1.54	0.434	0.434 46.885	0.848	fence	9	926.64	-1679.60	-1679.60 43.641703690	-102.230906209
367	723337.93	723337.93 4835808.14						fence	9	919.02	-1676.68	43.641732279	919.02 -1676.68 43.641732279 -102.230999247
368	723301.69	723301.69 4835809.49 726.47	726.47	0.73	0.241	8.031	0.514	fence	9	882.79	-1675.32	882.79 -1675.32 43.641755377	-102.231447429
V149	723301.98	V149 723301.98 4835808.80		0.54	0.299	0.299 15.254	0.758	fence post, Hmag targ #368	9	883.07	-1676.02	43.641749013	883.07 -1676.02 43.641749013 -102.231444206
369	723293.35	723293.35 4835805.72						fence	9	874.44	-1679.10	-1679.10 43.641723889	-102.231552354
370	723266.82	723266.82 4835803.50 728.01		-0.56	0.226	6.587	0.982	fence	9	847.91	-1681.31	43.641711955	847.91 -1681.31 43.641711955 -102.231881821
371	723249.20	723249.20 4835802.81 727.69		-0.42	0.226	6.592	0.800	fence	9	830.30	-1682.01	-1682.01 43.641710993	-102.232100241
372	723231.01	723231.01 4835802.16 728.32		-0.40	0.155	2.150	0.944	fence	9	812.10	-1682.65	43.641710661	812.10 - 1682.65 43.641710661 - 102.232325815
373	723219.50	723219.50 4835802.22 728.07		-0.43	0.197	4.343	0.963	fence	9	800.59	-1682.60	43.641714579	800.59 -1682.60 43.641714579 -102.232468346
374	723213.84	723213.84 4835801.63 728.01		-0.66	0.199	4.491	0.945	fence	9	794.93	-1683.18	43.641711032	794.93 -1683.18 43.641711032 -102.232538709
375	723199.88	723199.88 4835801.75 726.36	726.36	0.87	0.266	10.727	0.758	fence	9	780.98	-1683.07	43.641716260	780.98 -1683.07 43.641716260 -102.232711430
376	723187.41	723187.41 4835801.42 727.66		-0.50	0.236	7.483	0.890	fence	9	768.50	-1683.39	768.50 -1683.39 43.641717091	-102.232866082
377	723166.22	723166.22 4835801.03 727.64	727.64	-0.23	0.214	5.633	0.959	fence	9	747.32	-1683.79	43.641719857	747.32 -1683.79 43.641719857 -102.233128588
378	723154.85	723154.85 4835800.88 727.89		-0.56	0.253	9.209	0.954	fence	9	735.94	-1683.93	-1683.93 43.641721967	-102.233269526
379	723148.97	723148.97 4835800.66 727.77		-0.55	0.221	6.205	0.977	fence	9	730.07	-1684.16	43.641721714	730.07 -1684.16 43.641721714 -102.233342359
380	723136.41	723136.41 4835800.21 727.70	727.70	-0.04	0.194	4.185	0.960	fence	9	717.51	-1684.60	43.641721459	717.51 -1684.60 43.641721459 -102.233498131
381	723130.29	723130.29 4835800.12 727.71		-0.80	0.202	4.721	0.950	fence	9	711.39	-1684.70	43.641722474	711.39 -1684.70 43.641722474 -102.233573909
382	723113.86	723113.86 4835799.74 727.48	727.48	0.00	0.264	10.548	0.956	fence	9	694.95	-1685.08	43.641723967	694.95 - 1685.08 43.641723967 - 102.233777633
383	723095.54	723095.54 4835799.73 728.36		-0.51	0.274	11.698	0.984	fence	9	676.64	-1685.09	676.64 -1685.09 43.641729361	-102.234004432
384	723084.12	723084.12 4835799.29 728.62		-0.71	0.230	6.995	0.741	fence	9	665.22	-1685.52	43.641728904	665.22 -1685.52 43.641728904 -102.234146034
385	723070.19	723070.19 4835799.56 728.35	728.35	0.10	0.293	14.382	0.911	fence	9	651.28	-1685.25	43.641735487	651.28 - 1685.25 43.641735487 - 102.234318496
386	723045.36	723045.36 4835823.15 728.74	728.74	-1.16	0.182	3.465	0.944	fence	9	626.45	-1661.66	43.641955124	626.45 -1661.66 43.641955124 -102.234616265

Targ ID	X MTU (m)	V MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)	Mom.	Fit Quality	Analyst Comments	UXO Class.	Local X (m)	Local Y (m)	Latitude	Longitude
387	723038.10	723038.10 4835831.24 728.23	728.23	0.89	0.209	5.193	0.936	fence	9	619.20	-1653.58	619.20 -1653.58 43.642029994	-102.234702738
388	723033.96	723033.96 4835835.74 728.17	728.17	-0.88	0.189	3.847	0.983	fence	9	615.06	-1649.07	43.642071738	615.06 -1649.07 43.642071738 -102.234752201
389	723013.44	723013.44 4835856.43 727.95	727.95	0.67	0.279	12.480	0.970	fence	9	594.53	-1628.39	43.642263918	594.53 - 1628.39 43.642263918 - 102.234997841
390	723008.65	723008.65 4835860.28 728.02	728.02	0.18	0.153	2.067	0.873	fence	9	589.75	-1624.54	43.642299983	589.75 - 1624.54 43.642299983 - 102.235055499
392	723001.38	723001.38 4835869.43 728.00	728.00	-0.26	0.169	2.771	0.917	fence	9	582.47	-1615.38	43.642384508	582.47 -1615.38 43.642384508 -102.235141799
393	722988.70	722988.70 4835881.43 727.71	727.71	0.15	0.242	8.113	0.783	fence	9	569.79	-1603.38	569.79 -1603.38 43.642496231	-102.235293882
394	722972.81	722972.81 4835898.64 727.95	727.95	-0.51	0.229	6.909	0.814	fence	9	553.90	-1586.17	43.642655779	553.90 -1586.17 43.642655779 -102.235483593
395	722959.68	722959.68 4835911.49 727.55	727.55	0.05	0.277	12.129	0.703	fence	9	540.78	-1573.33	43.642775215	540.78 -1573.33 43.642775215 -102.235640847
396	722948.28	722948.28 4835922.93 728.59	728.59	-0.44	0.203	4.774	0.675	fence	9	529.37	-1561.88	-1561.88 43.642881577	-102.235777354
397	722940.66	722940.66 4835931.73 728.10	728.10	-0.99	0.224	6.434	0.831	fence	9	521.75	-1553.09	43.642962957	521.75 - 1553.09 43.642962957 - 102.235868082
398	722937.04	722937.04 4835937.65 723.49	723.49	4.32	0.573	0.573 107.62	0.505	fence	9	518.14	-1547.16	43.643017338	518.14 -1547.16 43.643017338 -102.235910420
399	722921.36	722921.36 4835949.45 727.66	727.66	-0.86	0.285	0.285 13.265	0.964	fence	9	502.45	-1535.36	43.643128161	502.45 - 1535.36 43.643128161 - 102.236099784
400	722917.89	722917.89 4835953.69 727.95 -0.29	727.95	-0.29	0.190	3.915	0.951	fence	9	498.99	-1531.12	43.643167335	498.99 -1531.12 43.643167335 -102.236140912
401	722905.77	722905.77 4835965.57 727.98	727.98	-0.20	0.260	0.260 10.021	0.958	fence	9	486.87	-1519.25	-1519.25 43.643277761	-102.236286111
402	722885.61	722885.61 4835986.49 728.32	728.32	-0.19	0.228	6.754	0.959	fence	9	466.70	-1498.32	43.643471977	466.70 -1498.32 43.643471977 -102.236527213
403	722882.01	722882.01 4835990.53 728.72	728.72	-1.59	0.169	2.740	0.919	fence	9	463.10	-1494.29	43.643509352	463.10 -1494.29 43.643509352 -102.236570141
404	722873.10	722873.10 4835999.18 728.94	728.94	-0.19	0.198	4.417	0.898	fence	9	454.19	-1485.63	43.643589886	454.19 -1485.63 43.643589886 -102.236676924
405	722868.86	722868.86 4836003.42 729.00		-0.48	0.191	3.953	0.952	fence	9	449.95	-1481.39	43.643629285	449.95 - 1481.39 43.643629285 - 102.236727675
406	722863.47	722863.47 4836012.91					-	fence	9	444.57	-1471.90	43.643716255	444.57 - 1471.90 43.643716255 - 102.236790447
>	724084.79	724084.79 4838254.78		0.04	0.057	0.106	0.989	too small for 105mm, no Hmag data	9	1665.89	769.97	43.663511490	769.97 43.663511490 -102.220734829
٧2	724054.49	724054.49 4838224.39		0.35	0.066	0.166	0.890	too small for 105mm, no Hmag data	9	1635.59	739.58	43.663247338	739.58 43.663247338 -102.221122848
V13	723912.24	723912.24 4837985.31		0.57	0.391	0.391 34.268	0.685	too big for projo, no Hmag data	9	1493.34	500.50	43.661140043	500.50 43.661140043 -102.222984251
V101		724275.25 4836842.53						fenceline, no Hmag data	9	1856.34	-642.29	43.650753046	-642.29 43.650753046 -102.218962095

Targ ID	X MTU (m)	Y MTU (m)	Targ HAE (m)	Depth (m)	Targ Caliber Mom. (m)		Fit Quality	Analyst Comments	UXO Class.	Local X Local Y (m) (m)	Local Y (m)	Latitude	Longitude
V105		724275.61 4836834.06					-	fenceline, no Hmag data	9	1856.71	-650.75	43.650676805	-650.75 43.650676805 -102.218961104
V106		724276.12 4836822.08						fenceline, no Hmag data	9	1857.21	-662.74	43.650568859	-662.74 43.650568859 -102.218959810
V107		724276.63 4836815.07						fenceline, no Hmag data	9	1857.72		43.650505738	-669.74 43.650505738 -102.218956446
V108		724276.25 4836803.68						fenceline, no Hmag data	9	1857.34	-681.13	43.650403395	-681.13 43.650403395 -102.218965881
V109		724276.75 4836789.32						fenceline, no Hmag data	9	1857.85	-695.49	43.650274105	-695.49 43.650274105 -102.218965573
V110	724276.88	724276.88 4836782.88						fenceline, no Hmag data	9	1857.97	-701.94	43.650216079	-701.94 43.650216079 -102.218966683
V112		724277.00 4836765.07						fenceline, no Hmag data	9	1858.10	-719.74	43.650055951	-719.74 43.650055951 -102.218972507
V113		724277.38 4836757.12						fenceline, no Hmag data	9	1858.48	-727.69	43.649984331	-727.69 43.649984331 -102.218971106
V115		724221.31 4836759.38						fenceline, no Hmag data	9	1802.40		43.650021516	-725.44 43.650021516 -102.219664702
V117		724277.89 4836724.92						fenceline no Hmag data	9	1858.99	-759.89	43.649694595	-759.89 43.649694595 -102.218978206
V118	724278.40	724278.40 4836714.13						fenceline, no Hmag data	9	1859.49	-770.69	43.649597322	-770.69 43.649597322 -102.218976421
V119	724275.93	724275.93 4836733.35						fenceline, no Hmag data	9	1857.03	-751.46	43.649770962	-751.46 43.649770962 -102.218999008
V133		723107.45 4836332.04		0.42	0.298	0.298 15.093	0.943	fencepost, no Hmag data	9	688.55	-1152.77	43.646513188	688.55 -1152.77 43.646513188 -102.233637070
V134		723118.69 4836314.47		0.24	0.230	6.961	0.905	fencepost, no Hmag data	9	699.79	-1170.34	43.646351804	699.79 -1170.34 43.646351804 -102.233505158
V135	723125.38	723125.38 4836304.66		0.63	0.321	0.321 18.981	0.971	fencepost, no Hmag data	9	706.47	-1180.15	43.646261579	706.47 -1180.15 43.646261579 -102.233426400